

ROTHERHAM
RURAL DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year 1906.

H. G. COOPLAND, Deputy Medical Officer of Health.

ROTHERHAM RURAL DISTRICT COUNCIL.

ANNUAL REPORT

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MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1906.

GENTLEMEN,—

During the year ending December 31st, 1906, 407 deaths occurred in your district. Of these, 193 were males and 214 females.

The births numbered 802. Of these, 409 were males and 393 females. 16 births were illegitimate.

Estimating the population at 25,000, the death-rate is 16.28 per 1,000 per annum. This is rather higher than the death-rate for 1905, which was 14.56 per 1,000.

The birth-rate is 32.08 per 1,000 per annum, and compares favourably with the birth-rate of England and Wales, which is only 27 per 1,000, the lowest ever recorded. During the past year 253 cases of zymotic diseases were notified, 53 occurring in the North Rotherham district, and 200 in the South Rotherham district. Of these cases, 34 were removed to Hospital from the Northern district, and 124 were removed to Hospital from the Southern district. One death occurred amongst the cases which were removed from your district to the Wath Isolation Hospital, and 5 deaths amongst the cases removed from your district to the South Rotherham Hospital.

Twenty-four deaths occurred from zymotic diseases in your district, viz., 10 deaths were due to Measles, 8 to Scarlet Fever, 2 to Enteric Fever, 3 to Epidemic Influenza, and 1 to Puerperal fever.

This is 2 less than last year, when 26 deaths occurred, and gives a death-rate of .96 per 1,000 per annum.

Scarlet Fever has been very prevalent, and has been reported from almost every village in the district. It has been chiefly of a mild type.

Diphtheria occurred in the villages of Canklow, Aston, Brinsworth (Atlas Street), Treeton, Elsecar, and Tinsley (Sales Row).

Enteric fever occurred at Catcliffe, Whiston, Aston Terrace, Atlas Street and Ellis Street, Brinsworth, Laughton Common, Swallownest, Whinney Hill, Tinsley, and Guilthwaite. All cases occurring in the localities mentioned have been visited, and when possible have been removed to Hospital. The houses have been disinfected, and any sanitary defects have been reported on and remedied as far as possible.

A special report was made on the condition of Aston Terrace, North Staveley. Enteric fever has occurred here from time to time. It was thought to be due to the dust blowing into the houses from the Privy-Middens, which are not well constructed. A door has been placed over the opening at the back of the ash pit, which will now stop the through draught. A footpath has been made at the back of the houses, which will keep them dryer, and it is to be hoped cleaner.

Six cases of Enteric Fever were reported at Guilthwaite. The water from the wells there was analysed, and found to be more or less contaminated. It was suggested that the most suitable well should be cleaned out and re-constructed, so that the inhabitants should be supplied with good water. The following schools have been closed in your district owing to epidemics of infectious disease :—

January 20th, 1906.—Schools at Laughton closed 1 week for disinfection owing to Scarlet Fever in district.

October 9th, 1906.—Schools at Thrybergh and Whinney Hill closed from October 5th to November 2nd owing to epidemic of Measles.

October 14th, 1906.—Schools at Dalton Parva closed from October 15th to November 12th owing to Measles.

October 21st, 1906.—Schools at Ulley closed from October 22nd to November 19th owing to German Measles.

November 15th, 1906.—Schools at Wickersley closed from November 17th for 24 days owing to Mumps.

December 1st, 1906.—Schools at Maltby closed from December 3rd for 1 month owing to Measles.

December 1st, 1906.—Schools at Catcliffe (Provided Infants) closed for 1 month owing to epidemic of Measles, Whooping Cough, and Chicken Pox.

December 15th, 1906.—Schools at Wickersley closed for a further period of 3 weeks owing to Mumps.

The Infant mortality of the district is 135 deaths under 1 year out of 802 births. This is at the rate of 168.32 deaths per 1,000 births. This is a very high death-rate, and can only be accounted for by improper feeding, want of care, and cleanliness, and insanitary conditions. We are indebted to Dr. Kaye for the Bacteriological examination of 24 specimens, viz., 8 of Enteric Fever (Widal reaction), and 16 of Diphtheria, which have been forwarded to him from your district. This has been a great help to medical practitioners in the district, in confirming an early and correct diagnosis of disease.

I have visited and inspected 102 Cowsheds, the reports on which have been forwarded to the Local Government Board. The majority of the Cowsheds are dirty, and badly lighted and ventilated. The drainage of the shed, as a rule, flows on to the surface of the yard. The manure from the shed is often allowed to stand for weeks just outside the shed door until it is utilized on the land.

During the present year the branch Water Supply has been extended in Aston, Thrybergh, and Whiston. The supply in Wickersley is inadequate in a dry season.

New sewage improvements have been made at Harley, Bramley, and Dalton, and new filter beds have been constructed at Tinsley and Swallownest. 99 nuisances have been abated, and 61 are at present in hand. The district has been free from small-pox during the present year. As yet, no steps have been taken with regard to the erection of a small-pox Hospital at Brampton. The necessity for the extension of the South Rotherham Joint Isolation Hospital has been much in evidence during the past year, as we are at present only able to deal with two diseases at the same time.

In conclusion, I wish to mention the invaluable assistance I have received from your Sanitary Inspector, Mr. Hey, and his staff in dealing with sanitary matters during the year.

Yours faithfully,

H. C. COOPLAND, L.S.A., Lond.,

Deputy M.O.H.

Vital Statistics.

POPULATION estimated to Middle of each Year.	BIRTHS.		Total Deaths Registered in the District				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all ages belonging to the District.	
	Num- ber.	Rate.	Under 1 year of Age.		At all Ages.					Num- ber.	Rate
			Num- ber.	Rate per 1,000 Births regis- tered.	Num- ber.	Rate					
(1905) 23000	764	33·21	109	142·67	335	14·56	10	4	2	333	14·47
(1906) 25000	802	32·08	135	168·32	374	14·96	8	5	30	407	16·28

Area of District
in acres, excluding
Water)

34825

Total Population at all ages, 18805—Census of 1901.
No. of Inhabited Houses, 3697.
Average No. of Persons per House, 5.09

Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.
1905	23000	764	335	109
1906	25000	802	407	135

Cases of Infectious Disease notified during 1906.

Notifiable Disease.	Cases Notified in Whole District.					Total Cases Notified in each locality.		No. of Cases Removed to Hospital from each locality.	
	At all Ages.	At Ages. Years.				North Rotherham District.	South Rotherham District.	North Rotherham District.	South Rotherham District.
		Under 1.	1 to 5.	5 to 15.	15 to 25.				
Diphtheria	17		1	9	3	5	12	4	7
Erysipelas	28		1	3	22	7	21		
Scarlet fever	181	3	47	112	14	38	143	28	101
Enteric fever	24		1	4	7	2	22	2	16
Puerperal fever.....	3				3	1	2		
Totals	253	3	50	128	49	53	200	34	124

Causes of, and Ages at, Death during 1906.

Causes of Death.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Total Deaths whether of Residents or Non-Residents in Public Institutions in the District.
	All Ages.	Under 1 Year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	
Measles	10	3	7	...	...	...	...	...
Scarlet Fever ...	8	2	2	2	1	1	...	..
Whooping Cough	5	3	2	...	...	...	...	..
Fever, Enteric ..	2	...	...	1	...	1	...	..
Epid'mc Influenza	3	...	...	...	...	3	...	..
Diarrhœa... ..	35	31	4	...	...	...	...	...
Enteritis	5	...	1	2	1	...	1	...
Puerperal fever ...	1	...	...	...	1	...	...	...
Phthisis (Pulmonary Tuberculosis)	14	...	...	...	5	9	...	..
Other tubercular diseases	8	2	5	...	...	1	..	..
Cancer, malignant disease	18	...	...	...	1	11	6	...
Bronchitis	32	16	4	2	...	7	3	...
Pneumonia	13	4	4	...	1	3	1	...
Other diseases of Respiratory organs	2	2	...	...	...	...	...	...
Alcoholism	2	...	...	...	...	2	...	...
Cirrhosis of liver } Premature birth } Diseases and accidents of par- turbation }	23	23	...	...	...	...	...	...
Heart diseases ...	18	...	...	1	...	7	10	...
Accidents	27	1	5	7	1	11	2	..
Suicides	2	...	...	...	...	2	...	...
All other causes..	146	47	15	8	9	43	24	...
All causes ...	374	134	49	23	20	101	47	13

Infantile Mortality during the Year 1906.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under one Year.
Measles							1										3
Scarlet Fever							2					1	1				2
Whooping Cough									1	1				1			3
Diarrhœa, all forms																	
Enteritis, Muco-enteritis, } Gastro-enteritis		1	1		2	3	4	3	5	3		4	1	1	1	4	31
Gastritis, Gastro-intestinal } Catarrh																	
Premature Birth																	
Congenital Defects.....																	
Injury at Birth	14	6	3		23		1	9		1	1						35
Want of Breast-milk, Star- } vation																	
Atrophy, Debility, Marasmus											1		1				3
Convulsions	2		1		3	1	1	1	4	1	1		1				13
Bronchitis.....						1	1	2	1		3		2	4		2	16
Pneumonia									1				1			2	4
Other Causes	2		4		6	4	2		4		4			2	2		24
	18	7	9		34	9	12	16	16	6	10	5	6	9	3	8	134

Population (estimated to middle of 1906), 25,000.

Births in the year :—Legitimate, 786 ; illegitimate, 16.

Deaths in the year :—Legitimate infants, 134 ; illegitimate infants, no record of.

Deaths from all causes at all ages, 134.

TABLE C. 1906.

ROTHERHAM RURAL SANITARY DISTRICT.

WATER SUPPLY.—Any extension during 1906—Aston 300 yards; Thrybergh, 289 yards; Whiston, 112 yards. Any inadequacy in any part?—Wickersley in summer.

SEWERAGE.—Extensions or Improvements during 1906—Harley Filters and extra land and new sewers. Sewers at Bramley and Dalton.

SEWAGE DISPOSAL.—Any modification recently?—Tinsley and Swallownest new, filter bed. Any marketable produce grown on sewage plots?—Cabbages, potatoes, parsnips, mangolds, and swedes.

SCAVENGING.—Performed by Contract in parts of district. No. of public urinals in district—One Canklow. Sanitary condition, good.

Regulated Buildings, Trades, &c.	No. in District.	No. on Register.	Total No. of Inspections made.	General condition.
Canal Boats	—	—	4	Good.
Slaughter Houses	15	11		Very good.
Cowsheds	—	113	102	Unsatisfactory.

FRIED FISH SHOPS—No. in district, 23.

COWSHEDS.—Any special inspection made during 1906—Two at Tinsley on account of Scarlet Fever in Sheffield City. Are “Rules for Milkers” still exhibited in all cowsheds—Have been distributed.

INFECTIOUS DISEASE.—What apparatus is available for disinfecting clothing, and where?—Steam disinfector Swallownest and Wath. How are dwellings disinfected?—By Sulphur Dioxide. Any placards or handbills issued during 1906?—Yes.

SCHOOLS.—Any ailment or contagious disease associated particularly with school life during 1906?—Mumps, Measles, Whooping Cough, Scarlet Fever, German Measles. No. of Special Reports by M.O.H. advising school closure—8 special reports.

MIDWIVES ACT, 1902.—No. of Midwives disinfected by the Sanitary Authority during 1906—Two.

DWELLINGS.—Number of houses built during 1906, 235. General character, through houses, with good air space. Is house-to-house inspection systematically made?—Yes. Are records kept?—Yes.

PREVENTION OF CONSUMPTION.—Any disinfection of patients’ houses?—Yes, when requested. Any distribution of advice?—County, M.O.H.’s Bills distributed.

NUISANCES.—Total number of nuisances in hand at close of 1905, 70. At close of 1906, 61. Reported during 1906, 90. Abated during 1906, 99. Total number of legal notices served for abatement of nuisances during 1906, 3.

No. of Sink wastes disconnected during 1906, 20. No. of sink wastes trapped during 1906, 8. No. of closets newly constructed during 1906, 182. Kinds, combined and w.c. No. of closets re-constructed during 1906, 6 kinds, Combined.

BURIAL GROUNDS.—No. in district, 16.

BIRTHS.—During 1906, males, 409 ; females, 393 ; total, 802. Number illegitimate, included in above, 16.

DEATHS.—During 1906 (1) Gross Deaths, i.e., total actually registered in the district without any correction, 412 ; (2) Nett Deaths, on which the rates are calculated—males, 193 ; females, 214 ; total, 407.

SANITARY REQUIREMENTS OF DISTRICT, AND SUGGESTIONS OF MEDICAL OFFICER OF HEALTH.—A Bye-law is required to make it compulsory (where good water supply is available) to put in water closets, in Urban parts of the Rural District instead of Privy Middens.

Annual Report of the Medical Officer of Health for the year 1906 for the Rural District of Rotherham on the administration of the Factory and Workshop Act, 1901, in connection with Factories, Workshops, Laundries, Workplaces, and Homework.

INSPECTION.

Premises.	No. of Inspections.
Factories (including Factory Laundries)	5
Workshops (including Workshop Laundries)	1
Workplaces	1
Total	7

HOME WORK.

Nature of Work.	Numbers of Addresses of Outworkers received from from other Councils.	Number of Inspections of Outworkers premises.
File making	1	1

REGISTERED WORKSHOPS.

Workshops on the Register at the end of the year.	Number.
Steel and Iron Works	4
Joiners, Wheelwrights, and Blacksmiths	17
Dressmakers	1
Bakehouse	1
Total number of workshops on Register	23

H. C. COOPLAND.

Deputy Medical Officer of Health.

February 25, 1907.



County Borough of Rotherham.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

BY

ALFRED ROBINSON, M.D.,

MEDICAL OFFICER OF HEALTH ;

MEDICAL SUPERINTENDENT ISOLATION HOSPITAL.

Mem. Royal Coll. Surg., Eng..

Licent. San. Science,

Ex-President Yorkshire Branch Incorporated Soc. of Med. Off. of Health.

Fellow of the Society of Med. Off. of Health.

FOR THE YEAR 1906.

Health Committee of the Council

OF THE

COUNTY BOROUGH OF ROTHERHAM.

Chairman:—ALDERMAN HICKMOTT, J.P.

Vice-Chairman:—COUNCILLOR GRUNDY, J.P.

Members:—ALL THE MEMBERS OF THE COUNCIL.

Isolation Hospital Sub-Committee :

Chairman:—ALDERMAN HICKMOTT, J.P.

Vice-Chairman:—T. W. GRUNDY, J.P.

THE MAYOR.

ALDERMAN CLARKE, J.P.

COUNCILORS BECKETT, CRANK, J.P., REEVES,

Dr. G. H. LODGE, and SEILES.

Officials of the Public Health Department :

Medical Officer of Health:—

ALFRED ROBINSON, M.D., M.R.C.S., L.S.Sc.

Deputy Medical Officer of Health:—

ROBERT G. RIDDELL, M.D., F.R.C.S.E., D.P.H.

Chief Sanitary Inspector:—C. E. PARKIN.

Assistant Sanitary Inspectors:—C. E. PARKIN, Junr.

S. F. NOTT.

Female Health Visitor:—Mrs. A. KEMP.

Matron, Isolation Hospital:—Mrs. HAWES.

Clerk:—WILLIAM PEARCE.

By the order of the Local Government Board, dated March 23rd, 1891, Article 18, Section 14, it is prescribed that the Medical Officer of Health shall “ prepare an Annual
“ Report to be made to the end of December in each year,
“ comprising a summary of the action taken during the
“ year for preventing the spread of disease, and an
“ account of the sanitary state of his district generally at
“ the end of the year. The report shall also contain an
“ account of the enquiries which he has made as to con-
“ ditions injurious to health existing in his district, and of
“ the proceedings in which he has taken part or advised
“ under the Public Health Act, 1875, so far as such
“ proceedings relate to those conditions; and also an
“ account of the supervision exercised by him, or on his
“ advice, for sanitary purposes over places and houses
“ that Sanitary Authorities have power to regulate, with
“ the nature and results of any proceedings which may
“ have been so required and taken in respect of the same
“ during the year. It shall also record the action taken
“ by him, or on his advice, during the year in regard to
“ offensive trades and to factories and workshops. The
“ report shall also contain tabular statements (on forms
“ to be supplied by the Local Government Board, or to the
“ like effect), of the sickness and mortality within the dis-
“ trict, classified according to diseases, ages, and locali-
“ ties.”

VITAL STATISTICS.

TABLE 1.—SUMMARY.

Population : Census, 1901.—Total, 54,349. Under 5 years, 7,552.
 5-15, 13,185.
 Estimate, 1906.—Total, 61,500. Under 5 years, 8,000.
 5-15, 13,890.

Births : Total No. registered, 1906, 1,941, including 86 illegitimates.

Notifications : Corrected for duplicate). Total received, 862, including :—

Smallpox	0	Puerperal fever	1
Scarlet fever	657	Membranous croup	4
Diphtheria	62	Simple continued fever ..	1
Enteric fever	66	Pulmonary consumption ...	64
Erysipelas.....	71		

Deaths.

Total uncorrected	1060	Rate 17.23	} per 1,000 Estimated population.
Total corrected	1005	Rate 16.34	
Under 1 year of age	307	Rate 158 per 1,000 births	
			registered.

Causes of Death : All ages, persons.

	No.	RATE.	
1 Smallpox	0	0	
2 Measles	64	1.04	
3 Scarlet fever	24	.39	
6 Whooping cough .	27	.43	
7 Diphtheria	7	.11	} No of Deaths under 1 year. 10 Diarrhœa, dysentery, 37 11 Epidemic Zymotic Enteritis 40 107 Gastro-enteritis 3
8 Enteric fever	8	.13	
“ Diarrhœa ” ...	51	.82	
21 Erysipelas.....	1	.01	
2 Puerperal fever ..	1	.01	
31 Phthisis.....	36	.58	
29, 30, 32-34 Other Tubercular dis. ..	27	.43	
47 Cancer	40	.65	
53 Premature birth .	74	1.20	} No. of Deaths, persons, all ages. 96-98 Pneumonias, 107 94-95 Bronchitis, 62 99-101 Other disea es, 216
94-101 Respiratory diseases	180	2.92	

SECTION I.

ANNUAL REPORT, 1906.

TO THE MAYOR, ALDERMEN, AND COUNCILLORS OF THE COUNTY
BOROUGH OF ROTHERHAM.

GENTLEMEN,—

I beg to submit for your consideration my Annual Report on the health of the Borough for the year 1906. Included are the new tables required by the Local Government Board, referring to Infantile mortality, which table I have further sub-divided into months, in order to show at a glance the unhealthiest months of the year.

It was not to be expected that the standard of the year 1905 could be maintained, which was a year unparalleled for its healthiness throughout the country. Up to the end of September, the health of the Borough was excellent, the death-rate being below the corresponding periods of 1905. We then had a phenomenal heat wave for many weeks, which proved disastrous to the infant life of the town, after which came a severe epidemic of Measles, which caused no less than 66 deaths amongst infants and young children. Infantile diarrhoea caused 51 deaths, and Whooping cough 27 deaths.

The death-rate for the year was 16.34 per 1000, a rate, of course, higher than the unprecedented figure for 1905, but yet, well below the average of the past 20 years. It is rather higher than the death-rate of England and Wales, which was 15.4, and compares favourably with the rest of the great towns of Yorkshire.

BIRTH-RATE.

The number of births registered during the year was 1941, of which 988 were males, and 953 females of this number; 86 were illegitimate, giving a percentage of 4.4, not a very satisfactory state of affairs, though somewhat less than previous years.

The morality of the town is not so good as it should be. The death-rate amongst illegitimate is always 50 per cent. higher than legitimate children. The birth-rate for the year is 31.66, as compared with 31.91 for the previous year. This is the lowest on record, and continues to decline year by year.

The birth-rate for England and Wales, 27, was also the lowest ever recorded, that of the 76 large towns, of which Rotherham is one, 27.9 per 1000.

INFANTILE MORTALITY.

This rate has increased from 123 per 1000 for 1905, to 158 per 1000 births for the year 1906. This is not satisfactory. Up to September this rate was much below the average, then the severe epidemic of diarrhœa amongst infants, which caused 51 deaths, and a very fatal outbreak of measles and whooping cough, completely spoilt the figures for the whole year. Without a doubt the high rate of mortality under 1 year is partly due to a more complete registration of the deaths of infants who survive their birth for a brief period only, and the maintenance of the high rate being largely accounted for by the increase in the number of deaths registered as premature births, congenital defects and other headings, these cases having been in previous years buried without either the birth or the death being registered.

SCARLET FEVER.

Scarlet Fever was epidemic during the whole of the year; 652 cases were reported, and 502 removed to our Borough Isolation Hospital and treated free of all cost. There were 27 deaths during the year, of which 15 occurred at the hospital, giving a death-rate per cent. 4.5, against 9 treated at home, with a death-rate of 5.8 per cent. These figures should prove the value of hospital treatment. The percentage of cases removed to the hospital was 72. The epidemic of Scarlet Fever is rapidly declining, and at the date of writing this report the number of cases in the Isolation Hospital is only 14. At one period of the year 76 patients were under treatment at the same time.

MEASLES.

After being absent for some years, Measles was again epidemic, and caused 64 deaths, being responsible for a death-rate of 1.07 per 1000 on the estimated population of 61,500. During the previous year not a single death occurred from this disease, but an outbreak was anticipated by the Sanitary authorities. Altogether about 700 cases came to my knowledge during the year. A detailed report on the outbreak is given in my report under "Vital statistics." The epidemic fortunately is now almost "burnt out," and until a fresh crop of susceptible children become available, we shall probably have a clean bill of health so far as this disease is concerned. The treatment of epidemics of Measles is probably one of the most difficult problems with which public health authorities have to deal.

WHOOPING COUGH.

This disease is always associated with Measles, either coming before or following in its wake. This year it has been the cause of 27 deaths, and is peculiarly fatal to infants under one year of age, the death-rate being .43 per 1000.

DIPHTHERIA.

Sixty-six cases of Typhoid Fever were reported, with .11 per 1000, this low rate being due to the free use of Antitoxin serum, which is supplied gratis by the health authorities to people who are not in a position to pay for it. This disease, during recent years, seems to have lost its virulence, or our present epidemics are of a milder type.

TYPHOID FEVER AND DIARRHŒA.

Sixty-six deaths cases of Typhoid Fever were reported, with 8 deaths. Diarrhœa caused 51 deaths.

During 1905, there were two deaths from Typhoid Fever, and 25 from Diarrhœa.

This increase in numbers as compared with previous years, is entirely due to the climatic conditions during the autumn months of 1905, which the evil effects of foul smelling ashpits, ill-paved yards, and slum property generally made themselves acutely felt.

CONSUMPTION OF THE LUNGS.

This disease was made a voluntary notifiable one in April, 1906. Up to the end of December, 64 cases had been reported. Probably 50 per cent. of the cases have not been notified.

It was the cause of 36 deaths, and yields a death-rate of .58 per 1000. This is a reduction of 75 per cent., as compared with the death-rate from this disease 30 years ago in the Borough.

The notification of the disease should be made compulsory.

The utilisation of one of the wards at the Isolation Hospital for the treatment of certain cases of Consumption is worthy of the consideration of the Health Committee. Consumption of the lungs being, in my opinion, an infectious disease.

THE EDUCATION (PROVISION OF MEALS) ACT, 1906.

This Bill came into force on 21st December, 1906, and gives to Local Education authorities for the first time, statutory powers in regard to the important matter of the provision of meals for children attending our public Elementary Schools. It empowers authorities to spend money from the rates for the provision of food for such meals within the limit of a half-penny rate.

The Act, which is purely permissive, and imposes no duty where a local authority thinks it necessary to bring it into operation, is primarily of an education character. Its object to ensure that children attending public elementary schools shall, so far as possible, be no longer prevented by insufficiency of food, from profiting by the education offered in our schools, and it aims at securing that for this purpose suitable meals shall be available just as much as for those whose parents are in a position to pay as for those to whom food must be given free of cost.

The Act opens up possibilities of a most beneficial nature, and furnishes unrivalled opportunities for the earnest, yet wise, social reforms for mitigating some of the deepest physical injuries that beset the children of the rising generation, particularly in some areas.

Whether the Act will be adopted by the Rotherham Education Committee is not yet decided, but in so far as its operations are concerned with underfed, ill-nourished, or destitute children, it will, if adopted, increase the work and responsibility of the School Canteen Committee, who should co-operate with the Medical Officer of the Education Authority, whose work in connection with education will thereby be increased.

ISOLATION HOSPITAL.

This Institution has now been opened for twelve months, from January 1st to December 31st. During this period 528 cases have been under treatment—479 of scarlet fever, 24 of typhoid fever, 15 diphtheria, and 10 measles. The death-rate has been 2.5 per cent., as compared with about 5.8 per cent. treated at home.

The advantages to the working man and to the education authority can hardly be over-estimated.

SMALLPOX HOSPITAL.

No further steps have been taken for the construction of the separate hospital for the treatment of this complaint. Fortunately, no case has been reported during the year.

BACTERIOLOGICAL WORK.

This department is now firmly established, and, during the year, no less than 360 specimens have been examined, against 288 during the previous year, showing that the work is being more appreciated by the medical men year by year.

A properly equipped laboratory is now provided at 12, Frederick Street, where examinations are daily made of suspected cases of diphtheria, enteric fever, and tuberculosis. The importance of this phase of preventive medicine cannot be over-estimated.

METEOROLOGICAL OBSERVATIONS.

No provision exists in the County Borough for taking and keeping these records daily in barometrical readings, rain fall, temperature, direction of the wind, degree of humidity, etc., etc. Provision might easily be made at 12, Frederick Street, where the daily records could be taken and kept.

During the year under consideration more attention has been paid to public health matters than has ever been the case previously. Very great beneficial changes have been effected in the personnel of the health officials. You have appointed a Medical Officer of Health to devote his whole time to the constantly increasing duties of this important office; you have provided a proper suite of offices at 12, Frederick Street, where all your health officials are housed under one roof; you have appointed a female health visitor, who, in nine months, has paid 2,748 visits to dirty and neglected children, etc.; and you have provided a properly equipped Bacteriological Laboratory.

All these changes are certain to result, in future years, in improved sanitary conditions, and a diminished death-rate, especially affecting the infant life of the town.

Your MIDWIVES' COMMITTEE has met frequently during the year, and has endeavoured, by various means, to educate the ignorant women, whom the State, in its wisdom, has given a "legal" qualification to practice this noble and ancient art. The question of the payment of medical men called in to assist these women in their difficulties is under the Committee's consideration at the present time. The question is by no means an easy one to settle on an equitable basis. The Mayoress (Mrs. Stoddart) is also encouraging midwives by offering prizes for the prevention of the "slaughter of the innocents."

During the year the Consumption (Tuberculosis) Committee has met on several occasions, and adopted the voluntary notification of this fatal disease. In conjunction with the Board of Guardians it has adopted the principle of isolating cases reported. This is a step in the right direction. Plans on the Chalet system are now awaiting confirmation by the Council.

Another important detail has been the question of the filtration of the Langsett water. Numerous complaints have been received by me about the discolouration. Steps are now being taken to remove the suspended matter in solution by the "Candy" filter, which has been found to work very effectively with water affected in similar manner to our own supply.

You have also appointed during the year a special sub-committee to deal with Infantile Mortality, and the question of the municipal control of the milk supply of the County Borough should form one of the details with which this important sub-committee would deal. In connection with the milk supply and its contamination, you have become members of the Joint Committee, consisting of the West and East Riding County Councils, and the County Borough Councils of Sheffield, Bradford, Leeds, and Hull, whose object will be to make investigations by the bacteriological examination of the same milk at various points in the transit of the sample from the farm to the consumers' pantry. My own opinion is that the greatest and most dangerous contaminations will be found to occur in the houses of the poor, due to the dirty conditions under which the milk is

kept. A Bacteriologist, devoting his whole time to the duties of the office, is about to be appointed for one year to deal with the milk supply of the above enumerated authorities. The results are being looked forward to with much interest, as the scheme on such a large scale has never been attempted by Municipal Authorities on any previous occasion.

In June you appointed a deputation, consisting of Dr. Lodge and myself, to attend the National Conference on Infantile Mortality, held in London in June last. Our Report on the various points raised at the meeting is printed in Appendix A of this Annual Report.

HOUSING OF THE WORKING CLASSES ACT.—This is always a thorny subject with which to deal. During the year twenty-eight houses have been reported to the Health Committee as being unfit for human habitation. Permanent improvements have been effected in the condition of many houses; many have been temporarily patched up, and before long will have to be reported upon again. None have been demolished, which is the only really satisfactory manner of dealing with most slum property.

Taking the vital statistics of some of the districts, such as Thornhill, Masbro', Kimberworth, St. Ann's and the North Wards, and the number of cases reported and the deaths which have occurred from measles, tuberculosis, diphtheria, and typhoid fever, and infantile mortality, it will invariably be found that the incidence of attack and death-rates is always most prevalent where the density of the population per acre is greatest, and where evil smells and slum property abound.

Would it not be a wise step for the Health Authorities to deal with a portion of one of the worst wards, to begin with, and endeavour by pulling tracts of houses down in these areas, and finding accommodation for the tenants elsewhere, to improve the conditions of the most insanitary areas? (See Tables 37, 38, 39, 40, etc.)

The conversion of privies into water closets goes on at a slow pace—at the rate of about 300 a year: there are still in the Borough about 3000, so that it will take ten years for the conversion of them all.

It appears to me that until the Health Authorities contribute something themselves towards the cost of the conversion of these privy middens into water closets, the progress of the work will not be expedited.

PRIVATE SLAUGHTER-HOUSES.

These have been regularly visited at frequent intervals during the year by the Sanitary Inspectors. The majority are kept in a clean, wholesome, and sanitary condition, and some are quite the reverse. The total number in the borough is 24, and all have been personally visited by myself. It is to be hoped that if the Public Slaughter-houses Bill becomes law at an early date, that public authorities will build public abattoirs, and after having made adequate provision in this respect, close private slaughter-houses in their areas.

Such scandals as those which have been reported from America could not have occurred had public slaughter-houses been universal there. Even on the grounds of humanity and sanitation, some at least of those at present in existence ought to be abolished, though of course the squalid revelations of Chicago could not occur in this country.

The slaughtering of animals should be carried out in the most humane way possible, and it is found by experience that the methods adopted in different districts and boroughs vary greatly, for instance, the Jewish method is extremely cruel and barbarous. In many countries, such as Denmark, Switzerland, and Germany, it is compulsory to render animals insensible by stunning before they are bled.

The up-to-date butcher generally demands the latest inventions in cash tills, bill fasteners, refrigerating apparatus, etc., and yet is content to employ the same method of slaughtering animals as was used by his great-great-grandfather.

The universal use of abattoirs would not cost butchers any more, possibly not so much, as the present plan of having so many small private slaughter-houses, and would at the same time be the cause of removal of a source of danger to the public health.

During my recent tour of inspection I found at one private slaughter-house a carcase of a pig hanging up by the hind legs with its entrails still intact. The body was quite cold, and how long it had remained in that position it is impossible to say. Everyone knows how important it is for pigs to be disembowelled without any delay whatever. This could not have happened at the public abattoir.

I must again express my sincere thanks to the Mayor, Chairman, and Members of the Health Committee for their valuable support during the past twelve months. Every suggestion that I have brought forward has been carefully considered by the committee, and usually adopted. The Chairman (Alderman Hickmott, J.P.) has devoted considerable time and energy for the benefit of the health of the community, and though during a part of the year his health has not been good, he has always been ready to support any reasonable proposals for improving the conditions under which the people live.

The Town Clerk has, as usual, always been ready and willing to give me the benefit of his valuable legal knowledge on the frequent occasions on which I have had to consult him.

To the sanitary staff, and in particular to the "Chief of the Staff," Mr. C. E. Parkin, sen., I must tender my sincere thanks for their loyalty and support during a year in which the change in the personnel of the Health Department might have led to misunderstandings, fatal to the discipline of the department.

My sincere thanks are due to the Matron (Miss Hawes) for her capable management of the Hospital. Her care of details and

general consideration for the welfare of the patients and staff have greatly lightened my anxieties. During the first year many difficulties have arisen which will not be likely to occur again. With these she has grappled bravely, and things have settled down into a well-ordered and methodical routine.

I am also indebted to Mr. J. H. Kershaw, F.C.S., sewage works manager, for the particulars of the rainfall at Aldwarke for the year 1906, who has also been good enough to send me a short report on the result of the working of the sewage disposal plant at Aldwarke and Thorpe Hesley.

I have the honour to be,

Your obedient servant,

ALFRED ROBINSON, M.D.,

Medical Officer of Health.

Public Health Offices,

12, Frederick Street, Rotherham.



SECTION II.

TOPOGRAPHICAL DESCRIPTION OF ROTHERHAM.

The County Borough of Rotherham is situated mainly on three declivities of three hills, which terminate at the eastern side of the River Don, and which respectively runs in a south-easterly, easterly, and north-easterly direction towards the villages of Whiston, Wickersley, and Dalton. The underlying strata of these hills are the Lower Red or Permian Sandstone. The greater portion of the remainder of the County Borough is built upon the aluvial valley of the river. The centre of the Borough, where the Parish Church stands, is about a quarter of a mile from the bank of the river, which separates it from Kimberworth, which is situate on the slope of another hill extending from the western side of the Don, in a westerly direction to Thorpe, the lower portion of it being called Masbrough, the underlying strata of this district being the upper and middle coal measures. The river takes a course more or less from south to north, and is the conflux of the Rother and the Don, which unite at Bow Bridge, on the south of the town, and separate Rotherham from Kimberworth.

The configuration of the Borough represents a very irregular and indented area, the width of which, at its narrowest portion, from north to south, is a little less than half a mile, and the length from east to west, a little less than 5 miles, the longest stretch being from east to north-west. The Borough is bounded on the east by the villages of Dalton and Herringthorpe, and the sparsely populated portion of the parish of Whiston, on the north by portions of the parishes of Rawmarsh, Greasbro', and Wentworth; on the west by the thinly populated part of Ecclesfield, and further northwards by the Blackburn Brook; and on the south by a portion of Whiston, Canklow Wood, River Rother, and still more westward, the River Don.

The Borough generally has undulating surfaces, some of which are very steep, the rainfall passing rapidly from the ground and finding its way into the river. From a health point of view, the position of the Borough is naturally healthy.

The level of the summer water of the Don at the Rotherham Borough is about 76 feet above mean, or half tide level at Liverpool. The centre of the Borough is about 116 feet above the Don level, and the highest point of the Borough at the south-east extremity is 380 feet, and at the western boundary, or centre of Kimberworth, is 480 feet, whilst the lower part, which adjoins the village of Dalton, is only 70 feet above the level. A considerable portion, especially on the western, northern, and eastern sides is still unbuilt upon, and the part which is built upon has its population unequally distributed. The class of houses varies also very much in the different parts of the town.

For registration purposes, the Borough is divided into nine wards municipal.

SECTION III.

VITAL STATISTICS.

POPULATION.

I estimate the population of the Borough to the middle of the year 1906, at 61,500. The natural increase of the population or births over deaths during the year 1906, was 936. There were 239 new houses certified as fit for occupation during the year, and allowing the usual number 9 5.1 to each house—as it was at the last census—the estimation of the population at the present date

must be under than over the exact number. The good state of trade also has probably increased the resident population. Within the last 50 or 60 years, Rotherham, like all provincial towns, has been remarkable for its very rapid growth, the tendency being to leave the country and flock to the large towns, the result being that there is a steady decrease taking place in the population of our smaller towns, the towns with a population of 2000 or 5000 suffering most in this respect.

The population of Rotherham is increasing at a very rapid rate, the increase being most marked in the eastern portion of the County Borough, and this is the direction towards which the increase will continue. An extension of the boundary of the Borough in this direction is desirable, if there are to be any open spaces left.

BIRTHS.

The total number of births registered during 1906 was 1941, being an increase of 26 over the previous year, and giving a birth-rate for the year of 31.6 per 1000 living. Allowing for the increase in the population, this is the lowest birth-rate ever recorded for Rotherham, the previous lowest being for the year 1905, which was 31.91 per 1000. The rate, however, is higher than the average for England and Wales, which was 27 for the year, and higher than that of the 76 large towns of England and Wales, which was 27.9 per 1000 living of the population.

The birth-rate throughout the country has been steadily declining for the last 30 years, when there was, for several years, a monotonous annual birth-rate of 36 per 1000. The birth statistics have changed their character since then, and a rapidly declining rate has furnished us with unmistakable proof of the intention to put a restraint upon natural fertility. At the present age, compared with the past, there are fewer marriages, and an increase shown in single life; much of the poverty that previously existed was due to large families. Another cause of the diminished birth-rate is emigration, whilst on the other hand, there has been a longer average duration of life, and an increasing immigration.

Of the children born in Rotherham during the year, 980 were males, and 961 females. The number of illegitimate children born was 86, against 95 the previous year. Of this number 47 belong to the Rotherham, and 39 to the Kimberworth Registration Sub-Districts. The percentage was 4.4, against 4.9 for 1905, a slight improvement.

TABLE II.

Vital Statistics for the year 1906. Annual Birth-rates and Death-rates from the Seven Chief Epidemic Diseases :—

	Annual Rates per 1000 living.			Infantile Mortality. Annual Death-rate of Infants under 1 year per 1000 Births.
	Births.	Deaths from all causes.	Deaths from Seven Chief Epidemic Diseases.	
England and Wales	27.0	15.4	1.73	133
76 Great Towns	27.9	16.0	2.24	146
142 Smaller Towns	26.5	14.4	1.70	138
England and Wales less the 218 Towns	26.3	15.0	1.18	115
Rotherham	*31.66	16.3	2.16	158

* Lowest ever recorded

TABLE III.

VITAL STATISTICS OF GREAT TOWNS OF YORKSHIRE.

Towns.	Estimated Population, 1906.	Death Rate.	Birth Rate.	Infantile Mortality.
Leeds	463,495	15.8	26.1	152
Sheffield	447,951	16.7	29.9	158
Bradford	288,544	16.1	20.6	152
Hull	262,426	17.0	29.6	161
Huddersfield	94,862	17.3	24.2	135
York	83,467	13.7	26.5	124
Rotherham	61,500	16.3	31.6	158

TABLE IV.

1906	Deaths from all causes.		Zymotics.	
	No.	Rate.	No.	Rate.
1st Quarter	228	14.82	11	.71
2nd Quarter	208	13.52	24	1.56
3rd Quarter	273	17.75	35	2.27
4th Quarter	296	19.25	63	4.09

TABLE V.

Population of and Number of Houses in the Various Wards.

	No. of Houses.		Population.	
East.....	1011	.....	5159	
St. Ann's	1360	.....	6944	
Clifton	1079	.....	5495	
South	1282	.....	6548	
West	1035	.....	5282	
North	1553	.....	8037	
Thornhill	1624	.....	8251	
Masbro'	1630	.....	8331	
Kimberworth	1460	.....	7453	
	<u>12034</u>		<u>61500</u>	

TABLE VI.

VITAL STATISTICS IN 1906 AND PREVIOUS YEARS.

YEAR.	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under 1 year.
1896.....	50,000	1718	751	256
1897.....	52,000	1766	925	314
1898.....	53,000	1785	871	288
1899.....	57,000	1903	934	322
1900.....	59,000	1956	989	334
1901.....	56,000	1975	981	347
1902.....	57,000	1970	865	278
1903.....	58,000	1933	1004	363
1904.....	59,000	1930	934	317
1905.....	60,000	1915	836	235
Averages of Years 1896 to 1905.	56,100	1885	909	305
1906.....	61,500	1941	1015	307

TABLE VII.

Year.	Birth Rate.	Death Rate.	Zymotic D.R.*	Population.
1874	49.33	26.21	4.70	28,379
1875	47.92	27.44	5.69	29,319
1876	43.58	20.16	3.66	30,149
1877	43.41	18.98	1.31	31,029
1878	43.97	21.62	5.94	31,631
1879	41.94	18.71	1.52	32,091
1880	41.50	20.16	2.55	34,404
1881	40.16	17.22	1.89	34,782
1882	40.20	20.98	2.84	35,547
1883	33.32	20.56	1.99	35,650
1884	42.46	19.20	3.90	35,650
1885	32.70	18.26	1.96	35,650
1886	41.95	20.25	2.61	35,550
1887	37.61	20.30	2.87	36,000
1888	36.72	18.10	1.38	36,182
1889	38.60	22.65	3.26	36,807
1890	38.39	20.84	3.17	37,907
1891	35.50	24.93	3.51	43,000
1892	35.61	19.00	1.97	44,000
1893	37.13	19.91	3.23	46,000
1894	32.00	16.51	2.08	47,000
1895	36.18	16.66	1.97	48,000
1896	34.36	15.00	1.40	50,000
1897	34.62	18.33	1.65	51,000
1898	34.32	16.75	1.26	52,000
1899	35.90	17.54	0.92	53,000
1900	36.24	18.31	1.62	54,000
1901	35.26	17.64	3.57	56,000
1902	34.56	15.17	1.70	57,000
1903	33.33	17.31	3.19	58,000
1904	32.70	15.83	2.69	59,000
1905	31.91	13.93	1.16	60,000
1906	31.60	16.34	2.16	61,500

* Principal Zymotic Diseases.

TABLE VIII.—Population, Inhabited Houses, Births, and Deaths.
(Gross Numbers.)

	No. of Inhabited Houses in the Borough	Births.	Deaths.	Total Deaths in Workhouse and Rotherham Hospital.	Estimated Population
1906	12,034	1941	1015	162	61,500
1905	11795	1915	836	127	60,000
1904	11,674	1930	934	174	59,000
1903	11,500	1933	1004	122	58,000
1902	11,223	1970	865	108	57,000
1901	11,000	1975	988	104	56,000
1900	11,440	1956	989	104	59,000
1899	11,000	1903	934	82	57,000
1898	10,447	1785	871	90	53,000
1897	10,009	1766	925	74	52,000
1896	9,711	1718	751	75	50,000
Av. of 10 yrs. 1896- 1905.	10,979	1885	909	106	56,100

**TABLE IX.—Annual Rate of Mortality, Death Rate Amongst
Children, &c.**

	Annual Mortality per 1000 living	Per cent. of Deaths to Total Births.	Deaths of Infants under 1 year per cent. to Total D'ths	Percentage of Deaths of infants to Registered Births.	Deaths of Children under 5 years per cent. to Total D'ths	Percentage of Deaths in Work- house and Rotherham Hospital
1906	16.34	51.77	30.54	15.81	50.14	10.54
1905	13.93	47.26	30.37	14.31	45.60	13.46
1904	15.83	48.39	33.92	16.42	48.60	14.34
1903	17.31	51.94	36.15	18.77	52.39	12.01
1902	15.17	43.91	32.14	14.11	47.74	12.48
1901	17.64	50.02	35.12	26.09	52.12	10.52
1900	16.76	50.56	33.56	16.86	46.41	10.51
1899	16.38	49.08	34.26	16.80	47.85	8.77
1898	17.86	49.84	31.67	15.15	45.10	8.65
1897	18.70	50.29	34.37	17.28	51.27	6.13
1896	16.51	54.24	30.67	16.83	48.94	8.50
Av. of 10 yrs. 1896- 1905.	16.60	49.55	33.22	17.26	48.60	10.53

TABLE X.

DEATHS Registered at several Groups of Ages from Different Causes, during the Year 1906

CAUSE of DEATH.	All ages.	Over 60 years.	25 to 60 years.	15 to 25 years.	5 to 15 years.	1 to 5 years.	(Infnts) und. 1 yr.	CAUSE of DEATH.	All ages.	Over 60 years.	25 to 60 years.	15 to 25 years.	5 to 15 years.	1 to 5 years.	(Infnts) und. 1 yr.
ALL CAUSES	1005	206	208	39	48	197	307	Asthma	2		2				
1—Zymotic.								Lung Disease, etc. . .	12	1			1		
Measles	64				7	44	13	Gastritis	5	1	1				3
Scarlet Fever	24				9	15		Enteritis	53	2	1		1	9	40
Whooping Cough . .	27				16	11		Peritonitis	12		4		2	3	3
Diarrhœa	51		2		12	37		Appendicitis	1		1				
Fever, Enteric . . .	8		5	2	1			Ascites	1		1				
Diphtheria	7		1		3	3		Disease of Bowels . .	1		1				
Erysipelas	1		1					Obstruct'n of Bowels	3		3				
Croup	3				1	2		Stricture of Btvels .	1		1				
Puerperal Fever . .	1		1					Hernia	3	2					1
Influenza	5	2	1	1		1		Intussusception . . .	1						1
Rheumatism	5		2	1	2			Stomach Disease, etc	4	2	1	1			
Syphilis	2						2	Jaundice	3					1	2
Alcoholism :—								Liver Disease, etc. .	7		7				
a Del. Tremens . .	1		1					Spleen	2			1			1
b Intemperance . .	2		2					Nephritis	5	2	1		1	1	
2—Constitutional.								Bright's Disease . .	12	5	4	2	1		
Dropsy	3		2				1	Diabetes	4	3	1				
Cancer	40	18	20		1	1		Calculus	1	1					
Ptomaine Poisoning .	1		1					Cystitis	2	2					
Septisæmia	1		1					Kidney Disease . . .	3		2	1			
Madasmus	5						5	Abcess	1		1				
Lymphadenorna . .	1			1				Ulcer	2		1	1			
Malnutrition	7					2	5	Skin Diseases	1		1				
Tuberculosis	27		15	3	1	4	4	Sclerosis	1	1					
Phthisis	36	4	18	13	1			4—Developmental.							
Hydrocephalus . . .	3					2	1	Premature Birth . .	74						74
Anæmia	4		3				1	Cyanosis	1						1
Rickets	6					2	4	Other Malformations	5				1		4
3—Local.								Teething	3					2	1
Cephalitis and								Child Birth	2		2				
Meningitis	24	1		2	4	8	9	Old Age	49	48	1				
Apoplexy	9	7	2					Atrophy & Debility	17		2			3	12
Paralysis	6	5	1					5—Violent Deaths.							
Chorea	1				1			(Accid't or Neglige'ce							
Epilepsy	5		4	1				Fractures & Contu's	5		3	1		1	
Convulsions	31				1	3	27	Wounds	3		3				
Brain Disease, etc. .	18	13	4					Burns and Scalds . .	4		1		1	2	
Tic douloureux . . .	1		1					Drowning	8	1	5	1	1		
Spinal Disease . . .	3		2	1				Suffocation	1						1
Ear Disease	1					1		Otherwise	1	1					
Aneurism	1	1						(Homicide)							
Heart Disease, etc. .	72	34	32	1	2		3	Murder & Mansla'ter	2		2				
Phlebitis	1	1						(Suicide)							
Laryngitis	3		1			2		Wounds	1		1				
Bronchitis	62	30	9			11	12	Drowning	4	1	1	2			
Pleurisy	4	1	3					Hanging	2	2					
Pneumonia	107	14	15	3	5	45	25	Sudden Death (cause	2		1			1	
								unascertained) . .							
								Natural Causes . . .	4		2			1	1

TABLE XI.
Shewing the Death Rate per 1000 for the Five Classes of Disease combined
in Table X. for Five Years.

		1906	1905	1904	1903	1902
I. Zymotic	.. ..	2.16	1.35	2.69	3.19	1.70
II. Constitutional	.. ..	3.28	2.20	1.64	1.91	1.93
III. Local	.. ..	7.83	6.58	7.15	7.59	7.10
IV. Developmental	.. ..	2.45	2.86	2.61	2.73	2.79
V. Violent	.. ..	0.60	0.55	0.64	0.74	0.51

TABLE XII.

Year.	Diarrhœa	Gastritis and Enteritis	Con- vulsions	Atrophy and Debility	Principal Zymotic Diseases	All other Classes	Total Deaths of Infants
1897	39	19	46	58	21	129	314
1898	49	33	25	29	13	139	288
1899	46	53	22	36	6	159	322
1900	32	4	36	38	33	191	334
1901	96	2	36	34	18	161	347
1902	28	13	21	29	9	178	278
1903	74	3	26	34	31	196	363
1904	69	7	27	26	19	169	317
1905	18	27	26	27	7	130	235
1906	40	41	30	26	24	146	304

TABLE XIII—CAUSES OF, AND AGES AT, DEATH DURING YEAR 1906.

CAUSES OF DEATH.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	
Measles	64	1	44	7	..	..	..
Scarlet fever	24	..	15	9	..	..	..
Whooping-cough	27	11	16	..	..	..	..
Diphtheria and Membranous Croup..	10	..	5	4	..	1	..	
Fever—Enteric	8	..	..	1	2	5	..	
Epidemic Influenza	5	..	1	..	1	1	2	
Diarrhœa	95	81	12	..	..	2	..	
Enteritis	15	..	9	1	..	2	3	
Puerperal fever	1	..	..	..	..	1	..	
Erysipelas	1	..	..	..	..	1	..	
Phthisis	57	..	..	1	14	18	4	
Other tubercular diseases	28	4	4	1	3	16	..	
Cancer	40	..	1	1	..	20	18	
Bronchitis	63	12	11	..	..	9	31	
Pneumonia	108	25	45	5	3	16	14	
Pleurisy	4	..	..	..	..	3	1	
Other Respiratory Diseases	9	..	2	1	1	3	2	
Alcoholism, Cirrhosis of Liver	10	..	..	..	..	10	..	
Premature Birth	74	74	..	..	..	..	..
Diseases and accidents of paturition..	2	..	..	..	..	2	..	
Heart diseases.. .. .	72	3	..	2	1	32	34	
Accidents	22	1	3	2	2	12	2	
Suicides	7	..	..	..	2	2	3	
All other causes	289	82	29	13	12	58	94	
All Causes	1015	307	197	48	41	214	208	

TABLE XIV.—VITAL STATISTICS OF WHOLE DISTRICT
DURING 1906 AND PREVIOUS YEARS.

Year.	Population estimated to middle of each year.	Births.		Total Deaths Registered in the District.						Total Deaths in Public Institu- tions in the District.	Deaths of Non- residents register'd in Public Institu- tions beyond the District.	D'ths of Non- residents register'd in Public Institu- tions beyond the District.	Nett Deaths at all Ages belonging to the District.	
		Number.	Rate.*	Under 1 Year of age.		At all Ages.							Number.	Rate.*
				Num- ber.	Rate per 1000 Births register'd	Num- ber.	Rate.*							
1	2	3	4	5	6	7	8	9	10	11	12	13		
1896	50000	1718	34.36	256	148.2	751	15.00	75						
1897	52000	1766	34.00	314	176.6	925	17.78	74						
1898	53000	1785	33.00	288	160.2	871	16.05	90						
1899	54000	1903	33.56	322	168.1	934	16.38	82						
1900	55000	1956	33.15	334	168.6	989	16.76	104	27	16	988	11.64		
1901	56000	1975	35.26	347	175.8	988	17.64	104	31	15	865	15.17		
1902	57000	1970	34.56	278	141.1	865	15.17	108	41	13	996	17.17		
1903	58000	1933	33.33	363	187.7	1004	17.31	122	22	14	948	15.83		
1904	59000	1930	32.70	317	164.0	980	16.60	162	46	14	836	13.93		
1905	60000	1915	31.91	235	123.0	855	14.25	137	39	20				
Averages for years 1896- 1905.	55400	1885	33.58	305	161.3	916	16.29	105	34	15	926	14.47		
1906	61500	1941	31.56	307	158	1061	17.23	162	56	10	1015	16.50.		

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums.

DEATHS.

The total number of deaths recorded in the Borough was 1005. Ten deaths occurred in Institutions outside the Borough. There were also 56 deaths of persons not resident, which took place at either the Rotherham Hospital or the Workhouse. The death-rate from all causes for the year 1906 was 16.30, as compared with 13.93 for the year previous.

The increase in the death-rate occurred during the last quarter of the year, and was owing to the great prevalence of, and mortality from, Measles (84 deaths), whooping cough (27 deaths), Infantile Diarrhoea and Enteritis (104 deaths). It is many years since so many deaths have been due to the last two diseases.

PERSONS OVER 60 YEARS.

In 49 cases the cause of death was given as "old age," the majority of these cases taking place at the Workhouse. The number of persons who were over 60 years of age at the time of death was 206, about 20 of the total number of deaths, which is rather less than in previous years.

More deaths are occurring each year in the Workhouse Hospital, and is not a pleasant reflection upon our social conditions. Certainly a larger number of cases of senile decay are admitted there, this is probably due to the greater care and attention they obtain owing to superior nursing and other comforts.

Heart disease, Bronchitis, Pneumonia, and Cancer were the principal causes of deaths amongst people over 60.

CANCER.

Though the death-rate from Consumption has largely declined during recent years, the rate from Cancer has remained stationary, and in man chiefly attacks the gullet, stomach, and intestines; in women, the breasts and womb are most frequently affected.

It cannot be too strongly stated how important it is that this disease should be recognised at the earliest possible moment. This recognition can only be attained by the patient going to his or her doctor for examination at the very beginning of the illness. No specific cure for cancer is yet known; but, as with consumption, the earlier the treatment is commenced the greater is the chance of its success. Unfortunately a large number of people put off seeking the advice of their doctor instead of going to him immediately when they notice anything wrong. It may be comforting to the "working man" of the town to know that by far the largest number of deaths from Cancer occur amongst those of "independent means!"

ADULTS BETWEEN 25 AND 60.

Between these ages there were 208 deaths, the chief causes being heart disease, cancer, pneumonia, and pulmonary consumption and other forms of tuberculosis. The last-named caused 33 deaths a proportion of 1 to 6 of persons dying in the prime of life, a figure exactly corresponding with the percentage of the previous year.

YOUNG PERSONS FROM 15 TO 25.

Of these, there were 39 deaths, compared with 32 for the year 1905. Of this number 13 died from consumption of the lungs, or a proportion of 1 in every 3 deaths. Is it surprising in face of these figures that steps are being contemplated with the object of reducing them? Two deaths from typhoid fever occurred at this age period, 1 from heart disease, and 3 from pneumonia.

CHILDREN FROM 5 TO 15.

Forty-eight children died between these years, seven deaths being due to measles, nine from scarlet fever, and three from diphtheria. Deaths from zymotic diseases always take place at this age period. Pneumonia is also fatal at this age, and caused five deaths.

YOUNG CHILDREN FROM 1 TO 5.

197 deaths occurred at this age, against 126 for the year 1905, 92 being from infectious diseases, as compared with 31 the previous year. Measles caused 44 deaths, and is especially fatal at this period of life, and is like whooping cough in this respect, which produced 16 deaths, scarlet fever being responsible for 15, and diarrhoea 12 deaths. Pneumonia was the cause of 215 deaths, as compared with 20 in 1905, and no doubt was associated in many cases with measles. Only 11 deaths were due to bronchitis, and 8 from inflammation of the brain and its membranes.

INFANTILE MORTALITY.

(INFANTS UNDER 1 YEAR).

There were 307 deaths during the first year of life, corresponding to a mortality rate of 158 per 1000 births, the number for the previous year being 235, and the rate 123 per 1000. The principal causes of the increased rate were 40 deaths from enteritis, 37 from infantile diarrhoea, 13 from measles, 11 from whooping cough, 27 from convulsions, 25 from pneumonia, and 74 from

premature birth. The majority of these deaths occurred during the last quarter of the year. Advertisements were inserted in the Public Press for many weeks, and many thousands of hand bills were distributed as to the proper method of feeding infants, and the importance of avoiding "bottle feeding" whenever possible. Hundreds of houses where births had recently occurred were visited by the Female Health Visitors. What would have been the number of deaths if this had not been done can only be a matter of conjecture. Naturally the advertisements were expensive, but most people will consider the money was well spent.

INFANTILE DIARRHŒA.

"The summer rise of infantile mortality does not commence until the mean temperature recorded by the 4 foot earth thermometer has attained somewhere about 56 Farenheit, no matter what may have been the temperature previously attained by the atmosphere or recorded by the 1 foot thermometer.

The decline of the infant mortality coincides with the decline of the temperature recorded by the 4 foot earth thermometer, which temperature declines much more slowly than the atmospheric temperature or than that recorded by the 1 foot earth thermometer." (Dr. Ballard).

The micro-organism which produces summer diarrhœa is almost always most active in the third quarter of the year, and is invariably associated with the following conditions:—A high temperature, a high soil temperature, and a polluted soil, such as the dirty, unpaved courts, the organisms from which pollute the air, and then any articles of food, especially milk, with which the atmosphere comes in contact

INFANTILE MORTALITY.

All children born shall be given a fair chance of living a healthy and sane and good life. Some babies you cannot kill; you may deprive them of their mother's milk, you may feed them out of a dirty bottle with a long india-rubber teat; you may give them even chipped potatoes and fried fish, and pickles, and patent foods, yet they persist in living. But this regimen must dispose of most babies, and the powers of resistance to disease on the part of those who do survive must be sensibly diminished. Naturally a high death-rate and a degenerate race go together, and they proceed from the same source. Every baby born should have a chance of living; nearly all babies are born healthy, and will live if they have a fair chance. The unnatural thing is for babies to die, and it is not only unnatural but absolutely unnecessary. Babies

do not die, they are killed. Two out of every three that pass out of life in their first year do not die—they are not allowed to live. During the month of September of the present year it was calculated that 10,000 babies died from absolutely preventable causes over and above the ordinary rate.

PRIMARY CAUSES.—Overcrowding, slum dwellings, defective milk supply, the employment of women in factories, &c. The young mothers are not wholly to blame. It is much to be regretted that our Educationalists do not in the case of female scholars include in the curriculum of ordinary school work the elementary principles of the feeding of infants. Training girls that they shall not be the helpless, ignorant creatures, as so many of them are when their first babies are born. Each mother should have a deep sense of responsibility for preserving the life of her child. Both mother and child suffer from whatever interferes with the health of the mother in breast fed babies. The bulk of deaths in the first three months is due to insufficient care on the part of the mother. Comparatively slight errors in dieting will prove fatal to many children. Fifty in every 100 bottle fed babies died before they become 12 months old. Of a 100 fed by mothers only 7 died in the Borough! In times of trade depression in factory towns, when mothers are kept at home through lack of work, the infant death-rate decreases.

REGISTRATION OF BIRTHS.—Every child's birth should be registered within 24 hours, so that the influences necessary to advise of how the child can best be reared may be brought to bear upon her at once by the Lady Inspector, voluntary or paid. A small fee for registration might help to bring about this desirable practice.

The Rotherham Corporation has recently appointed a Special Committee to deal with Infantile Mortality, which has now reached the high percentage of 158 per 1,000 births, so that there is every prospect of steps being taken to lower the high death-rate. The Local Government Board also now require that the ages at death of infants shall be stated in weeks under 1 month, and in months under 12 months. I have further subdivided this table showing the months when Infantile Mortality is highest.

TABLE XXII.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One Year
Measles									1	1	1		3	2	2	3	13
Whooping Cough							1		2	1	2	1		2	1	1	11
Diarrhoea, all forms			1				4	6	4	7	3	1		5	3	3	40
Enteritis, Muco-enteritis, Gastro-enteritis			1				8	5	3	3	3	1	1	4	2	2	39
Gastritis, Gastro-intestinal Catarrh			1				1	1									2
Premature Birth	39	9	7	4	59	7	1	1									8
Congenital Defects	5	2		1	8												8
Atrophy, Debility, Marasmus	3	4	1	2	10	6	2	2	2		1		2			1	26
Tuberculous Meningitis						1			1								3
Tuberculous Peritonitis																	
Tabes Mesenterica								1	1	1	2						4
Other Tuberculous Diseases									1	2	1					1	6
Syphilis									1								2
Rickets								1	1	2						1	4
Meningitis (not Tuberculous)							1		1		1			1	1	1	6
Convulsions	5	2	2	2	11	2	2	2	4	2	2	1		2		2	30
Bronchitis							2	2	1	2			2				13
Pneumonia				1	1		1		3	3	2		3	1	3	3	25
Suffocation, overlying							1										1
Other Causes	2		2		4			1			1						6
	54	17	16	10	97	27	24	22	25	24	19	10	11	17	13	18	307

County Borough of Rotherham Population, Estimated to middle of 1906, 61,500.

Births in the year. Legitimate, 1,855; illegitimate, 86

Deaths in the year. Legitimate infants, 278; illegitimate infants, 29.

Deaths from all Causes at all ages, 1,005.

January.

TABLE XXIII.
INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Total under 1 Month.										Total Deaths Under One Year									
	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.					
Gastritis, Gastro-intestinal Catarrh	1	1	3	1	5		1													
Premature Birth	1				2															
Atrophy, Debility, Marasmus	1				1		1													
Rickets	1				1						1		1							
Convulsions										1										
Bronchitis																				
Pneumonia																				
	3	1	3	1	8	2	1	3	1	1	1		1							

April.

TABLE XXVI.
INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.				1-2 Weeks.			2-3 Weeks.			3-4 Weeks.			Total under 1 Month.	1-2 Months.								2-3 Months.		3-4 Months.		4-5 Months.		5-6 Months.								6-7 Months.		7-8 Months.		8-9 Months.		9-10 Months.		10-11 Months.		11-12 Months.		Total Deaths Under One Year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	4	3	2	1	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	1	16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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May.

TABLE XXVII.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One Year
	5	2		1	8	2	3	1	1	2	1		1	1		1	21
Diarrhoea, all forms																	1
Enteritis, Muco-enteritis, Gastro-enteritis					6		2	1									1
Premature Birth	4	2			1												1
Congenital Defects	1																1
Atrophy, Debility, Marasmus						1			1				1				1
Syphilis																	1
Meningitis (not Tuberculous)					1					2	1			1			1
Convulsions				1													1
Pneumonia																	1
Other Causes																	1

June.

TABLE XXVIII.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Deaths from stated Causes in Weeks and Months under One Year of Age.																
	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One Year
Measles	2	1	1		1		1				1		1		1		1
Whooping Cough																	
Diarrhœa, all forms																	
Gastritis, Gastro-intestinal Catarrh ..			1		1									1			
Premature Birth		1			3	1											
Atrophy, Debility, Marasmus		1			1												
Tuberculous Meningitis																	
Meningitis (not Tuberculous)											1						
Convulsions																	
Bronchitis																	
Pneumonia																	
	2	2	1		5	1	1		1		2		1	1	3	2	17

July.

TABLE XXIX.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One Year
Measles																	1
Whooping Cough																	4
Diarrhoea all forms																	1
Enteritis, Mucro-enteritis, Gastro-enteritis																	1
Premature Birth	3	1		1	5	1											1
Atrophy, Debility, Marasmus																	1
Tuberculous Meningitis								1									1
Other Tuberculous Diseases																	1
Convulsions	1				1												2
Pneumonia																	1
Suffocation, overlaying																	1
	4	1		1	6	1	1	1	1	2		1	2	2	1	1	19

August.

TABLE XXX.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One Year
Measles									1	1				1		1	1
Whooping Cough										1		1		1			3
Diarrhoea, all forms							2	3		1	1	1		1			11
Enteritis, Muco-enteritis, Gastro-enteritis			1		1		3	3			1			2		1	11
Premature Birth	4			1			1										6
Congenital Defects	1	1			1												3
Atrophy, Debility, Marasmus		1			1						1					1	3
Other Tuberculous Diseases			1		2		1	1									3
Convulsions		1															1
Bronchitis											1						1
Pneumonia																	1
Other Causes																	1
	5	3	2	1	11		7	8	1	2	4	1		4	1	4	43

September.

TABLE XXXI.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Deaths from stated Causes in Weeks and Months under One Year of Age.																
	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One Year
Measles					1	2	1	1	3	5	1			2	1	1	20
Diarrhoea, all forms			1								1						2
Enteritis, Muco-enteritis, Gastro-enteritis						2	2	1	2	1	2			2	1	1	14
Premature Birth	7				7			1									8
Congenital Defects		1			1												1
Atrophy, Debility, Marasmus	1			1	2												2
Tuberculous Meningitis						1											1
Tuberculous Peritonitis: Tuberculous Mesenterica										1	1						1
Rickets																	1
Meningitis (not Tuberculous)							1										1
Convulsions	2				2									1			3
Bronchitis.....												1					1
Pneumonia			1		1								1				1
Other Causes																	1
	10	1	2	1	14	5	4	3	5	7	6	1	1	5	2	4	57

TABLE XXXII.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

[illegible]

November.

TABLE XXXIII.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH,	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One Year
Measles								1						1		1	2
Diarrhoea, all forms																	1
Enteritis, Muco-enteritis, Gastro- enteritis												1					1
Premature Birth	1		1	1	3	2											5
Atrophy, Debility, Marasmus	1	1			2												4
Tuberculous Peritonitis: Tabes Mesenterica					1						1	1					1
Convulsions											1	1	1				3
Bronchitis.....								1				1					2
Pneumonia																	3
	3	1	1	1	6	4	1	2			2	3	1	1	1	1	22

December.

TABLE XXXIV.

INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One Year
Measles									1	1			2		1		4
Whooping Cough									1								1
Enteritis, Muco-enteritis, Gastro-enteritis						1											1
Premature Birth	6		1	1	2												2
Congenital Defects	1			1													1
Atrophy, Debility, Marasmus						3			1								4
Tuberculous Peritonitis : Tabes Mesenterica										1							1
Other Tuberculous Diseases								1	1								2
Meningitis (not Tuberculous)						1											1
Convulsions		1			1		1	1									3
Bronchitis			1							1					1		2
Pneumonia										1							1
	7	1	2	2	12	5	1	2	4	4		1	2		2		33

SECTION IV.

MILK ADULTERATION : HOW IT TAKES PLACE.

Cow's milk is the best substitute for mother's milk. When any substitutes for human milk become necessary every precaution must be adopted to ensure the milk being free from impurities of any kind. Cow's milk may be contaminated by the hands of the milkers by the hairs or dust from the cow, by the milking pail which has been washed by water infected with germs of bacteria. It may receive germs travelling from the cow-shed to the milk seller, and then again perhaps in the filthy cupboard where it is stored by the householder. The commonest diseases due to infected milk are epidemic diarrhœa, especially Infantile, Enteric Fever, Scarlet Fever, and Diphtheria and Tuberculosis. To prevent these diseases being conveyed milk should be strained and cooled immediately after the cow is milked, before it starts on its journey. But when these conditions are complied with up goes the price of milk ! Therefore it is better to resort to boiling or sterilizing milk on its receipt by the consumer, thus destroying any germs already in existence.

MILK TRAVELLING BY RAIL.—Cans conveying milk by rail ought to be locked and sealed. The present method of milk transit is essentially bad. The idea of sending the most important, and to hundreds of children and sick persons, their only food, up and down the country in receptacles that can be opened by anyone desiring a drink is one that lets in a flood of light upon the whole system. Milk should be conveyed in cans locked and sealed, so that they cannot be opened until the contents are delivered to the consignee. A man may, as things exist now, take out a quart of milk and add a quart of water, and imagine he has done no actual harm, but nature adds Bacteria, and microbes, millions of them good, bad, and indifferent, chiefly the last two. Merely locking cans will not keep those invisible but busy hands out. Something more is required.

SALE OF MILK.—It is greatly to be desired that the regulations with regard to the sale of milk should be uniform, as it is even more necessary to have pure milk than sound meat. One often sees milk exposed for sale in shops in open pails in the same room as a varied collection of such articles as cabbage, potatoes, onions, lamp oil, and general stores. Surely it is high time such a practice should be discontinued ; but even given a sweet and clean milk seller's shop, we still have open cans in which milk is exposed for sale. Now, it is well-known that milk is a food which is more easily infected by noxious germs than most things. Let us then get rid of the open pan system.

The question of the municipal control or supervision of the milk supplies of towns and even villages will ere long become a subject with which our Health Authorities will have to deal. In many places municipalities are now opening milk depots and supplying mixtures suitable for children at all ages. The cost is about one shilling per week per child, which cannot be considered an extortionate amount. Cow's milk is the best substitute for mother's milk, but it should be largely diluted with water or barley water, and a little sugar added. It is found that the poor simply add the water, which quantity is gradually diminished as the child gets older. Such enterprise as I have indicated would ensure a mother getting a pure and suitable prepared milk for her baby. It is legitimate municipal trading, and does not in any way imply the suspension of the Dairy Farmer and the substitution of the municipal cow.

“STEPS TO BE TAKEN TO DISCOVER WHERE MILK CONTAMINATION TAKES PLACE.”

A meeting was called in July last by the County Councils of the West and East Ridings of Yorkshire, and attended by delegates from the Town Councils of Sheffield, Leeds, Bradford, Hull, and Rotherham, and was held at Leeds, at which a resolution was unanimously adopted to the effect that it was desirable to undertake a systematic investigation into the conditions of milk supply in the area of the Councils, with a view to ascertain the extent, if any, to which the supply is contaminated, and the sources of such contamination. A committee was formed (subject to confirmation by the various Councils represented) with instructions in the first instance to follow samples from the farm to the consumer, examining and testing it at different stages of its transit, so as to find, if possible, where contamination occurs. The amount to be spent on the inquiry is limited to £500, to be provided by the authorities in proportion to rateable value.

The County Borough of Rotherham was represented by the Chairman of the Health Committee (Alderman Hickmott) and the Medical Officer of Health (Dr. Alfred Robinson). The proportionate share of the expenses for Rotherham amounts to £6 6s. 8d., a very small amount considering what important results will probably be achieved from the bacteriological examinations.

The various delegates met on subsequent occasions and agreed that the investigations should be carried out under the following conditions:—

MILK EXAMINATION.

It is suggested that samples of milk should be taken, if practicable, on the same day (a) at the farm, (b) place of delivery by wholesaler, (c) place of delivery (i.e., street) by retailer in the town, and (d) shop or dairy from which milk is sold.

The following information should be obtained in each case: (1) Temperature of place where sample was taken, (2) temperature of milk at time of taking sample, (3) time of taking sample, and (4), general surroundings at the place and time of sampling.

In addition to this, special attention should be paid (a) **AT THE FARM**: To the place in which the milking takes place, its temperature, its cleanliness, the cleanliness of the cow, of the stall, of the milker, and of the milker's clothes, the general condition of the farm, distance of any permanent or temporary manure pit from the cowshed, condition as to light, ventilation, and air space. Note should be made, in addition to the temperature of the milk from which the samples are taken, of the size of the can, the number of the cows whose milk is contained in it, and the amount of any filtering which it may have undergone.

(b) **STATION OR OTHER PLACE OF DELIVERY**: Note should be taken of the can, time outside temperature, conveyance (whether cart, railway van, etc.), nature of van, cart, and state of cleanliness, and distance over which milk has travelled. Note should also be made by the person taking these samples as to the method adopted by the retailer in transferring the milk from the farmer's can to his own, where the transference took place, and the circumstances as to possibilities of contamination. Note should also be made as to rain, dust, neighbourhood of gullies, ashpits, etc.

(c) **STREET DELIVERED MILK**: Note should be taken, in addition to the temperature of the milk, of the conditions as to dust, rain, etc., outside temperature, condition as to cleanliness of the cart, cans and clothing of the retailer, and distance from point of delivery by wholesale dealer, also time and place of sampling, method of delivery of milk, whether by bottle, small can or dip can, or whether by large can or barrel taken round in cart.

(d) **MILK SOLD IN SHOPS**: Note should be taken of the temperature of the milk, of the shop, its aspect, means of ventilation, arrangements for keeping the milk, such as in gauze or glass cases, and note as to any means of keeping the milk cool and free from dust, condition of the shop, cleanliness of dealer.

It seems further desirable that samples should be taken from farms without previous warning, that in every case samples be taken in duplicate and in sterilised bottles.

That one of the duplicate samples be placed in ice and transferred with the least possible delay to the laboratory, but not examined before 11 o'clock.

That the other duplicate sample from the farm be kept under ordinary atmospheric temperature, but in a stoppered bottle, until 11 a.m., then placed in ice and sent to the laboratory.

That the milk from the farm be again sampled on arrival at the station in the town of delivery, that two samples be taken as

previously, one placed in ice and sent to the laboratory, the other kept until the last sample of the same milk has been collected from the retailer.

That samples be taken in the same way from the retailer's milk cans as delivered in the street, viz., two samples, one to be placed in ice and sent at once to the laboratory, the other to be kept till the shop samples have been collected.

That a sample be collected from shops to which the particular farm milk has been sent not later than 11 o'clock. The sample should be placed in ice at once and sent, along with the control samples of the same milk in its different stages, to the laboratory.

SECTION V.

INFECTIOUS DISEASES.

SMALL-POX.

No case of Small-pox was notified during the year—a very satisfactory record.

The Vaccination Officers report that 1805 children from 1941 births were successfully vaccinated during the year, 1039 being in the North-West, and 766 in the South-East Registration Sub-Districts. The number of births in the borough for the year being 1941, the number of children born who are protected against attacks of Small-pox is 92.99 per cent., against 96.4 per cent. for the previous year. Making due allowance for the early deaths of many infants, this is a very satisfactory return, and shows how efficiently the Vaccination Act is enforced in the borough, and how effectively the Vaccination Officers perform their duties.

TABLE XXXV.

STATISTICS AS TO SCARLET FEVER.—1906.						
Year	Approximate Population	No of Cases of Scarlet Fever Notified or Ascertained	No. of such Patients isolated in Hospital.	Total Deaths registered from Scarlet Fever.	Mortality per cent.	Percentage removed to Hospital.
1886	35,550	54		3	5.5	
1887	36,000	112		2	1.8	
1888	36,182	128		12	10.6	
1889	36,807	187		23	12.2	
1890	37,907	206		33	16.0	
1891	43,000	131		10	7.6	
1892	44,000	111		8	7.2	
1893	46,000	72		4	5.5	
1894	47,000	325		25	7.6	
1895	48,000	178		12	6.7	
1896	50,000	259		4	1.5	
1897	51,000	212		19	8.9	
1898	52,000	219		13	5.9	
1899	53,000	258	2	14	5.4	0.7
1900	54,000	726	54	35	4.6	7.4
1901	56,000	267	61	5	1.8	22.8
1902	57,000	127	31	3	2.3	24.4
1903	58,000	246	17	9	3.6	6.9
1904	59,000	168	51	4	2.3	30.3
1905	60,000	429	174	17	3.9	40.5
1806	61,500	657	479	15	8.1	71.3

TABLE XXXVI.—Cases of Infectious Diseases notified during 1906.

NOTIFIABLE DISEASE	Cases Notified in Whole District.						Total Cases Notified in each Locality.								Number of Cases Removed to Hospital from each Locality												
	At all Ages	Years.						(H)	St. Ann's	Clifton	South	(W)		North	Thornhill	Masbro'	Kimberworth	(H)	St. Ann's	Clifton	South	(W)		North	Thornhill	Masbro'	Kimberworth
		Under 1	1 to 5	5 to 15	15 to 25	25 to 66	65 & up'ds					West	East														
Diphtheria	62	16	29	8	9		2	17	5	4	5	6	10	4	9	3	1	1	1	1	1	1	1	4	3	3	
Membranous Croup	4	1	3							3		1															
Erysipelas	71	1	3	13	43	8	7	9	5	6	12	9	10	8	5												
Scarlet Fever.....	657	4201	386	44	22		37	66	37	74	95	106	112	57	73	18	46	27	51	75	83	71	51	42			
Enteric Fever.....	66	8	24	13	21		1	6	2	6	5	17	10	13	6		1		2	2	3	1		5			
Continued Fever ..	1		1												1												
Puerperal Fever....	1				1							1															
Pulmonary Con- sumption.....	64		15	18	31		2	10	4	5	8	7	14	11	3												
Totals	926	6231	458	96	127	8	49	108	53	98	125	147	156	93	97	21	48	27	54	78	87	76	59	45			

“SCARLET FEVER.”

The epidemic which commenced during the latter months of 1905 continued all through the year 1906. During the year 657 cases were notified, and were about equally distributed throughout the borough, the largest number being reported in the Thornhill Ward (112) and the North Ward (116). The total number of deaths amounted to 24, against 17 for the previous year. Considering the number of cases reported, the mortality rate is low. The cause of the decrease of scarlet fever mortality is undoubtedly due to a change in the type of the disease, and this change of type occurs in consequence of improved sanitary conditions, and will probably be still more accentuated in future years. It must always be remembered that the majority of cases of scarlet fever treated at home in Rotherham at the present time (owing to the large percentage isolated in hospital) is found in less crowded or larger houses, where there is a spare room or rooms, and where “home isolation” is possible; whilst those cases removed to hospital are chiefly taken from small houses, often crowded with children, where there is no spare room, and no possibility of isolation. The present epidemic of scarlet fever has been the most expensive and most severe that has occurred since the year 1900, when 726 cases were reported with 54 deaths. Epidemics of this disease invariably break out once in every five or six years, and Rotherham has been no exception to this rule. In order to obtain the best results from hospital treatment, there should be ample accommodation and no overcrowding, and where the hospital wards, from time to time, as opportunity occurs, can be closed and thoroughly cleansed and disinfected. Under these conditions there is always a marked diminution of such complications as suppurating ears and nose, inflammation of the lymphatic glands, rheumatism and kidney mischief. The epidemic is now rapidly declining, the result, in my opinion, of the isolation in hospital of such a high percentage of the cases.

I am quite aware of the fact that the question is often asked whether the results achieved are proportionate to the great expense incurred in consequence of isolation, and that great uncertainty and difference of opinion exists as to the value of hospital isolation in cases of scarlet fever, and that it is desirable, in the public interest, that a full and authoritative inquiry into the subject should be made. Under any circumstances the advantages to the working man are manifest; and forfeiture in grants to Education Authorities—a very important item—as regards the attendance of other children in the house from which a case has been removed is obviated.

MEASLES.

The following is an extract from the Annual Report upon the health of Rotherham for the year 1905:—

“There is a remarkable contrast between the year 1904 and 1905 with respect to this disease. In the former there was a very severe epidemic, and great numbers of children of school age were

attacked, no fewer than 37 deaths being registered. The epidemic probably ceased from lack of fresh material—burned itself out, as it were—and the results are seen in the statistics of the disease for 1905. Not a single death occurred from measles during the year, and only 41 cases of children absent from school from the disease were notified by the Attendance Officers.

This condition of affairs would be gratifying, did we not take into consideration the fact that the town's immunity from measles has been attained by most of the children it contains having suffered from the disease in the preceding year. The control of measles is one of the difficult problems of public Health."

The following table shows the mortality from measles in Rotherham during the last ten years:—

1897	.....	28 deaths (epidemic)
1898	.....	28 deaths do.
1899	.....	1 death.
1900	.....	35 deaths.
1901	.....	49 deaths (epidemic).
1902	.....	36 deaths.
1903	.....	24 deaths.
1904	...	37 deaths (epidemic)
1905	.....	(41 cases).
1906	.....	40 deaths (epidemic 476 cases).
(Up to November 16th, 1906.)		

My anticipations of another outbreak of the disease were very quickly fulfilled, and the present epidemic of measles was not long in making its appearance.

During January of the present year five cases were notified to me by the Education Authority; in February four; in March fourteen; in April none; in May eight; (up to this date no death was certified as having been due to this disease); in June five, with three deaths; in July ninety-eight cases were reported, with three deaths; in August twenty-two cases, with ten deaths; in September fifty-four cases, with three deaths; in October one hundred and four cases, with four deaths; and up to November 16th ninety-four cases, with seventeen deaths.

No means are available for ascertaining the number of cases which have occurred in the Sunday Schools within the Borough.

The Education Authority's Schools were closed for fifty-six days on account of holidays during the period January 1st to November 16th, and how many cases occurred during the closed period is simply a matter of conjecture, but adding one-sixth to the number will increase the cases to four hundred and seventy-six. It is only natural to assume that many cases occurred which did not come under the notice of the Sanitary Authority.

About 15 years ago measles was a disease compulsorily notifiable in this Borough.

AGE.

Judging from the number of deaths, it was found that the incidence of attack was greatest amongst infants between the ages of one and five, the deaths during this period numbering 30. Under one year of age there were eight deaths. Between the age of 5 and 15 the incidence was very small, only two deaths taking place. The lessening liability in the higher ages being, of course due to so many at those ages being protected by a previous attack in childhood. The conclusion arrived at being that the great bulk of children have, before the completion of the fifth year, taken measles, and the practical inference is that it is needless and useless in a threatened epidemic of measles to close schools in so far as children above six years of age are concerned.

The total deaths included twenty males and twenty females.

SEASON.

Measles is usually a distinctly seasonable disease, and generally reaches its highest prevalence in the coolest months of the year. The present epidemic bears out this view, as the largest number of deaths have occurred in the present month.

DISTRICTS.

The epidemic made its first appearance in the Kimberworth Ward, from whence it spread to the Masbro', Thornhill, North, and St. Ann's Wards, and then re-appeared in the Kimberworth Ward. From thence it appeared to spread throughout the whole of the Borough. The greatest mortality occurred in St. Ann's Ward and Kimberworth Ward. The number of cases occurring in each Ward was as follows :—

East Ward	20 cases.
St. Ann's Ward	81 cases.
Clifton Ward	16 cases.
South Ward	13 cases.
West Ward	8 cases.
North Ward	87 cases.
Thornhill Ward	54 cases.
Masbro' Ward	96 cases.
Kimberworth Ward	33 cases.

It was also found that the highest rate of mortality occurred in the low-lying and congested districts of the town, as for example St. Ann's Ward. No death occurred in the West Ward.

The population of the various wards is here given :—

East Ward	4940
St. Ann's Ward	6495
Clifton Ward	5425
South Ward	6457
West Ward	5299
North Ward	7928
Thornhill Ward	8323
Masbro' Ward	8287
Kimberworth Ward ...	7270

It is noticeable that in all epidemics of measles the death-rate in one-roomed houses, i.e., where a family lives in one room, is three times as great as the average, whilst in houses with four rooms and upwards this rate is about one-third of the average. In other words, amongst those attacked by measles, for every child that died in a four-roomed about seven died in a one-roomed house. The mortality is found to be less than half in two-roomed houses, to one-roomed houses, and in three-roomed houses twice as high as in four-roomed houses. How often is a death from measles notified in a house occupied by the middle class? Why, practically never.

Therefore, it follows that the case mortality has been affected to a great extent by the social conditions under which the children attacked lived, as determined by the size and number of the rooms in the house. The smaller the house the greater has been the death-rate.

There has been no evidence of the epidemic being determined by atmospheric or similarly widespread conditions. It is probably caused, for the most part, by the accumulation of susceptible material.

PECULIARITIES OF THE DISEASE.

At least ten cases (with one death, which had been admitted into the Borough Isolation Hospital as scarlet fever), subsequently developed into measles, after periods varying from one to three weeks. The symptoms of all these cases having been very indefinite.

ASSOCIATION WITH OTHER DISEASES.

Whooping cough was most commonly associated with measles, and, as has been so frequently the case, these diseases follow each other. It is generally supposed that measles predisposes or prepares the way for whooping cough. Epidemics of measles and whooping cough have, in past years, in my experience, alternated with considerable regularity in Rotherham. I have also noticed that measles is associated more with social conditions than whooping cough.

COMPLICATIONS.

Broncho-pneumonia, acute pneumonia, bronchitis, tubercular meningitis, and convulsions have been common complications. Gastro-intestinal diseases were of frequent occurrence in determining the fatal issue. This is probably accounted for by the very unusual prevalence of infantile diarrhoea in the Borough during September and October.

MORTALITY.

This rate has been rather over eight per cent. of the known cases. The mortality in each ward has been as follows :—

East Ward	2 deaths.
St. Ann's Ward	17 deaths.
Clifton Ward	1 death.
South Ward	1 death.
West Ward	Nil.
North Ward	3 deaths.
Thornhill Ward	2 deaths.
Masbro' Ward	5 deaths.
Kimberworth Ward	9 deaths.

The mortality from the disease is probably over the correct rate, as many cases have not come to the knowledge of the Sanitary Authority.

There is no doubt in my mind that a considerable proportion of the deaths recently certified as being due to broncho-pneumonia and other lung diseases have been associated with the prevalence of measles in the districts where these deaths have taken place.

MEASURES ADOPTED IN THE BOROUGH TO PREVENT THE SPREAD OF THE DISEASE.

I. Up to quite recently the whole family of an infected household were excluded from attending an elementary school. This method having proved extremely unsatisfactory in stamping out the epidemic, the following recommendations have been suggested by me and adopted by the Education Authority, and added to the "Code of Instructions to Teachers."

"MEASLES."

"PRECAUTIONS TO BE TAKEN AGAINST THE SPREAD OF."

1. "Children suffering from measles must be excluded from school for at least one month.

2. "Children coming from houses where measles exist, but who are not themselves suffering from the disease, should be dealt with as follows:—

- (a) "A child attending other than an Infant School, who has had measles, need not be excluded from attendance at School.
- (b) "A child attending other than an Infant School, who has not had measles, must be excluded from attendance at School until the Monday following the expiration of fourteen days from the occurrence of the last case.
- (c) "A child attending an Infant School, whether or not it has had measles, must be excluded from attendance at School until the Monday following the expiration of 14 days from the occurrence of the last case in the house where the child resides.

II. Four thousand bills have been distributed to the houses of ten thousand children attending schools in the Borough by means of the head teachers, teachers, and pupil teachers in these schools. One hundred and twenty-five large posters of similar bills have been placarded throughout the Borough. Copies of these bills have also been inserted in the public press.

A large number of the schools have been thoroughly disinfected with sulphur-di-oxide by the Sanitary Authority.

The following Schools have been closed for periods mentioned:—

St. Bede's (Infants), October 23rd to November 19th.
 St. Bede's (Mixed), November 7th to November 19th.
 St. Mark's (Infants), November 5th to December 3rd.
 Rotherham National (Infants), November 12th to December 3rd.
 Thorpe Hesley National, November 19th to December 10th.

My rule has been that if the percentage of infants absent from school, or a department, has been twenty per cent., I have recommended that the school be closed for three weeks or a month. Only Infants' Departments (with one exception) have up to the present time been closed. All infants in the Borough are excluded from attending school under 5 years of age.

III. All the Non-Provided Schools in the Borough have been disinfected, these having had the largest proportion of cases, which is accounted for by their being generally more overcrowded, and consequently in a more insanitary state, especially with regard to ventilation, etc., than the Provided Schools.

IV. During the past six months 168 cases of measles have been visited, most of which were discovered by visiting the houses for other reasons, such as overcrowding, dirty houses, births, and school complaints. Mothers do not realise the danger of measles, and regard them as a necessary evil. In fact, one is often told that "as every child must have them, the sooner they have them the better." Parents have, in many cases, been spoken very strongly to about allowing children free of infection to run in and out of infected houses. No doubt the reckless manner in which children are exposed to infection, and the ignorance displayed regarding simple remedies and isolation, have much to do with the spread of infection.

CONCLUSIONS.

1. That the vast majority of children take measles before they reach the age of six, and that it may be assumed for questions of school attendance that there is little danger to others in allowing children from measles infected houses to continue at school if their class mates are of the ages of six and upwards.

2. That the disease has been considerably more fatal between the ages of one and five years than in later years; and that it is of the greatest importance to use the utmost efforts to protect children from infection during the first five years of life.

3. That the mortality is greatly increased by inferiority of social conditions, as measured by the size of the house in which the patient resides.

4. About twelve per cent. of the children in invaded houses escaped attacks although they had not had measles previously.

5. Ordinary domestic cleansing suffices for disinfection after measles.

6. A certain proportion of cases of measles of the worst type might with advantage be treated in Isolation Hospitals.

7. Measles usually forms a black spot in all the annual reports of medical officers of health. The cost of compulsory notification of measles makes it prohibitory, but now that Borough Councils are the Education Authority, it will be easy in future years to secure notifications of this zymotic disease by teachers in charge of elementary schools, and records kept of the number of cases ascertained during known periods.

Under present conditions there is in all large, and even small communities a great lack of control in connection with the treatment and management of epidemics of measles.

In my experience I have found that the social positions and habits of people who suffer most acutely from measles, precludes them—or at any rate they do not—send for medical assistance until the patient is to all intents and purposes “moribund.”

MEASLES EPIDEMIC, 1906.

Cases of Measles notified to Medical Officer of Health by Education Authority, showing the Wards in which the cases occurred :—

	Total.	East.	St. Ann's.	Clifton.	South.	West.	North.	Thornhill.	Masbro'.	Kimberworth.
January	5	1					4			
February	4	1	2				1			
March	14			2	3	6	1	1	1	
April	—	—	—	—	—	—	—	—	—	—
May	8									8
June	5	2	2	1						
July	98	8	43	4	1		38		2	2
August	22	1	19	1	1					
September	54		7	6			15	6	18	2
October	104		1	2			8	24	53	16
November	94	7	7		8	2	20	23	22	5
	408	20	81	16	13	8	87	54	96	33

MEASLES EPIDEMIC, 1906.

DEATHS IN THE VARIOUS WARDS.

		Total.	East.	St. Ann's	Clifton	South.	West.	North.	Thornhill.	Masbro'.	Kimberworth.
Week ending	June 8th..	2									2
Do.	15th..	1									1
Do.	22nd .										
Do.	29th..										
Do.	July 6th..	1									1
Do.	13th..										
Do.	20th..										
Do.	27th..	2		1			1				
Do.	Aug. 3rd..	2		2							
Do.	10th..	1							1		
Do.	17th..	1		1							
Do.	24th..	4	1	3							
Do.	31st ..	2		2							
Do.	Sep. 7th..	2		1		1					
Do.	14th..										
Do.	21st ..	1		1							
Do.	28th..										
Do.	Oct 5th..	2		1	1						
Do.	12th..	1		1							
Do.	19th..										
Do.	26th..	1								1	
Do.	Nov 2nd .	5	1	2					1	1	
Do.	9th..	4		1				1			2
Do.	16th..	8		1				1		3	3
		40	2	17	1	1		3	2	5	9

MEASLES EPIDEMIC, 1906

DEATHS AT THE SEVERAL AGE GROUPS

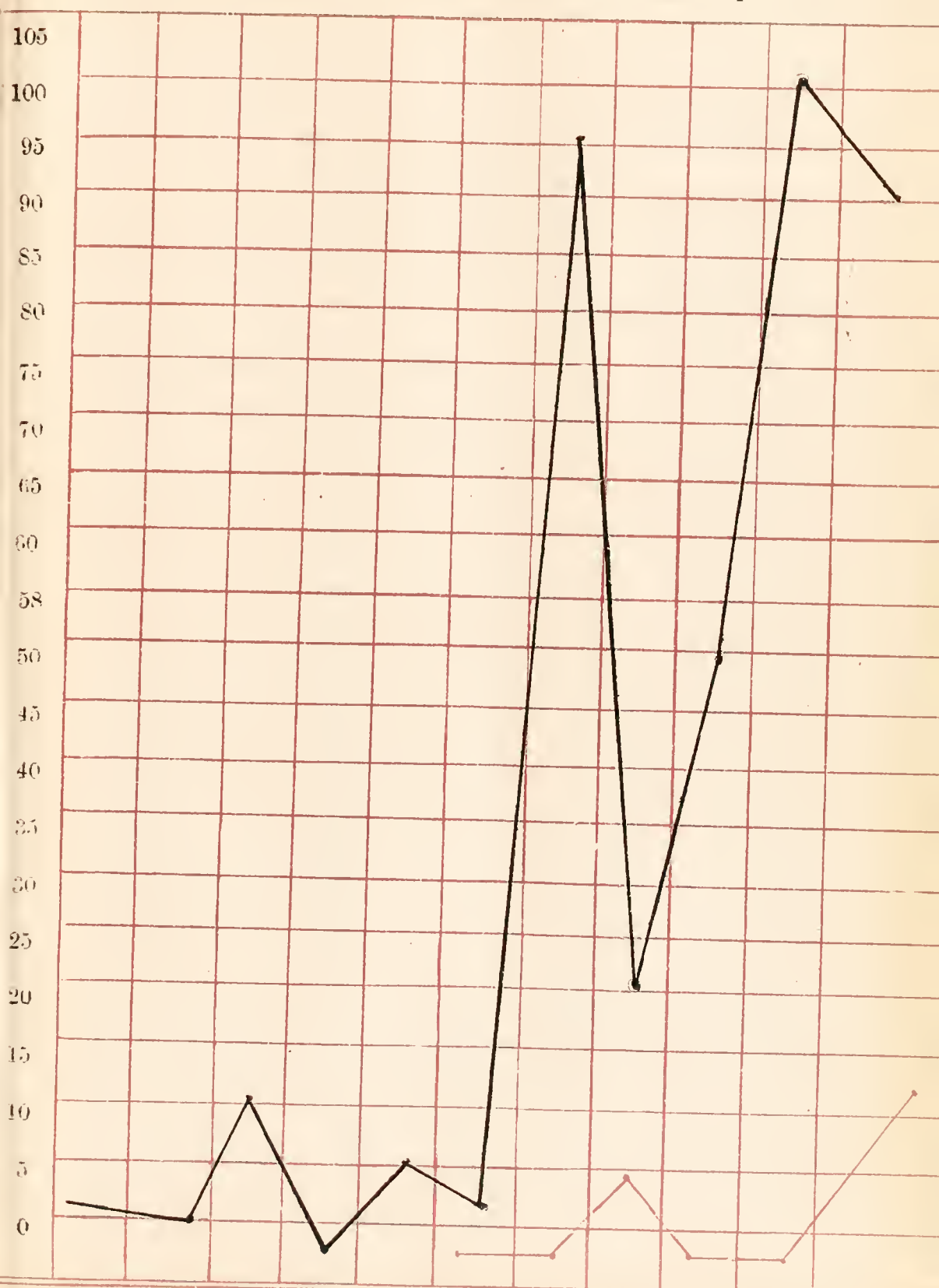
		At all ages	Under 1 year	1 to 5	5 to 15
Week ending	June 8th....	2	1	1	
Do	15th....	1		1	
Do	22nd ...	—	—	—	
Do	29th....	—	—	—	
Do	July 6th....	1	1		
Do	13th....	—	—	—	
Do	20th....	—	—	—	
Do	27th....	2		1	1
Do.	Aug. 3rd....	2		2	
Do.	10th....	1		1	
Do.	17th....	1		1	
Do.	24th....	4	1	3	
Do.	31st	2		1	1
Do.	Sep. 7th....	2	1	1	
Do.	14th....	—	—	—	
Do.	21st	1		1	
Do.	28th....	—	—	—	
Do.	Oct. 5th....	2		2	
Do.	12th....	1	1		
Do.	19th....	—	—	—	
Do.	26th....	1		1	
Do.	Nov. 2nd ...	5	1	4	
Do.	9th....	4		4	
Do.	16th....	8	2	6	
		40	8	30	2

COUNTY BOROUGH OF ROTHERHAM.

MEASLES EPIDEMIC, 1906.

MONTHLY CASE AND MORTALITY INCIDENT.

Cases. Jan. Feb. Mar. Apl. May. June July. Aug. Sep. Oct. Nov.



Black lines indicate cases.
Red lines indicate deaths.

Schools closed April 12, 23rd.
Schools closed July 27, Aug. 27th.

MEASLES EPIDEMIC, 1906.

MORTALITY AS REGARDS SEX.

		Total.	Males.	Females.
Week ending	June 8th.....	2	2	
Do.	15th.....	1	1	
Do.	22nd	—	—	—
Do.	29th.....			
Do.	July 16th	1		1
Do.	13th.....	—	—	—
Do.	20th.....	—	—	—
Do.	27th.....	2		2
Do.	Aug. 3rd.....	2	2	—
Do.	10th.....	1		1
Do.	17th.....	1		1
Do.	24th.....	4	3	1
Do.	31st	2		2
Do.	Sep. 7th.	2		2
Do.	14th.....	—	—	—
Do.	21st	1	1	
Do.	28th.....	—	—	—
Do.	Oct. 5th.....	2		2
Do.	12th.....	1		1
Do.	19th.....	—	—	—
Do.	26th.....	1	1	
Do.	Nov. 2nd	5	1	4
Do.	9th.....	4	4	
Do.	16th.....	8	5	3
		40	20	20

CONTINUATION OF THE REPORT UP TO DECEMBER 31st, 1906.

From November 16th, to the end of the year 158 additional cases came to the knowledge of the Sanitary Authorities, making a total number for the year of 658. There were also 24 more deaths, making altogether 64. This gives a death-rate of just 10 per cent., and proves that measles, when epidemic, causes more deaths than all the other five zymotic diseases added together.

The epidemic is now subsiding, probably, as I have said before, burning itself out from lack of fresh material. The only districts affected at present are Masbro' and Kimberworth and Thorpe, and in these there are fewer cases reported each week.

The disease will probably be absent from the Borough for some years, at any rate until a fresh number of susceptible infants appear in our midst.

"DIPHTHERIA."

During the year 62 cases of diphtheria and 8 of membranous croup were reported. There were 10 deaths. Twenty-four cases were removed to the Isolation Hospital, with 3 deaths, which gives a death-rate of 12 per cent, as compared with a death-rate of 18 per cent. of cases treated at home. All the cases removed to Hospital were verified by Bacteriological examination, and all were treated by the injection of Antitoxin. Diphtheria and Membranous Croup are synonymous terms, and as it is impossible to distinguish clinically between the two, it would be better to abolish the latter term from the list of notifiable diseases.

There is a disposition on the part of some medical men to call their cases Membranous Croup, as the term is less alarming to the relatives and friends of the patient. Fifty-one phials of antitoxin were distributed gratuitously (each containing 2000 units) to the medical men practising within the Borough.

Taking into consideration the great difference in the mortality rate between hospital-treated and home-treated cases, I hope in future years we shall find a larger proportion of the cases reported removed into our Isolation Hospital.

ERYSIPELAS.

Twenty-one cases of this complaint were notified during the year, and it seems to me that no advantage is gained to the community by its notification. The Medical Officer of Health can take no preventive measures, except the supply of disinfectants, which in the vast majority of cases is not at all necessary. Cases are never admitted into Isolation Hospitals, and I do not think the cost of the notification of erysipelas can be justified by the results obtained from it, and fail to see any utility in allowing this complaint to remain upon the notification schedule.

TYPHOID, ENTERIC FEVER.

Sixty-six cases of this disease were notified during 1906, against 56 for the previous year. Fifteen of these cases were removed to Hospital. There were altogether 8 deaths, which yielded a death-rate of 12 per cent. There is no doubt that the prevalence of this disease is a sure index of the manner in which Borough Councils look after the interests of the health of the inhabitants. Twenty years ago 195 cases were notified in one year, with 32 deaths. Typhoid fever is nearly always a water borne disease, and the gradual adaptation of the water carriage system of dealing with excreta, together with our improved water supply, has had much to do with the diminishing number of cases year by year. General outbreaks are extremely uncommon, unless due to polluted water supplies and personal contagion from a previous case is accountable for most of the cases met with, and it is this that renders the removal of all cases to Isolation Hospitals eminently desirable. The fatality of the disease, its directly infectious character, and the prolonged period of the illness are all lessened by Hospital treatment. Nurses in attendance upon typhoid cases take this complaint more frequently than any other. This is generally due to want of care of the hands in the attendance upon enteric patients.

NEW ISOLATION HOSPITAL,

BADSLEY MOOR LANE.

This Institution has now been in working order for 12 months, and during this period 495 cases have been admitted from the Borough. One case was taken in from Sheffield, the authorities there having not sufficient accommodation at the time for any but very urgent cases. The admissions according to the disease certified were as follows:—

Scarlet Fever	.....	464
Diphtheria	.....	17
Enteric	.....	14

Ten cases admitted as scarlet fever subsequently developed measles, and were a source of endless anxiety to the authorities at the Hospital.

DEATHS.

There were altogether 24 deaths, including 15 from scarlet fever, 3 from diphtheria, 4 from enteric, and 2 from measles.

The death-rate from all diseases was 4.8 per cent., a very low proportion, considering the seriousness of many of the cases on admission into Hospital.

SUMMARY OF CASES TREATED IN THE ISOLATION HOSPITAL.

Total number admitted during the 1906, 495.

SCARLET FEVER: 464. Percentage of admissions to cases reported, 70, percentage of deaths treated in the Hospital, 3.2; percentage of deaths treated at home, 3.6.

DIPHTHERIA: 17 cases. Percentage of admissions to cases reported, 27; percentage of deaths treated in the Hospital, 17.6; percentage of deaths in cases treated at home, 8.8.

ENTERIC FEVER: 14 cases. Percentage of admissions to cases reported, 21.2; percentage of deaths treated in the Hospital, 28.5; percentage of deaths in cases treated at home, 7.6.

Due allowance must be made for errors in diagnosis. All cases in Hospital were confirmed by means of Widal's reaction.

These indicate that the demands upon the Hospital are steadily increasing, and probably year by year a larger proportion of cases reported will seek admission for Hospital treatment, when the fact becomes better known that the death-rate amongst Hospital-treated cases is far below those treated at home. This especially applies to severe cases of enteric fever, a disease which requires skilled nursing, and sometimes for many weeks. Treachotamy cases of diphtheria also have a far better chance of surviving than they would have in the overcrowded houses of the Borough.

The largest number of cases on any one day during the year 1906 was 76, in February, 1906; the lowest number 17, on December 31st. The average duration in Hospital was 32 days. The Hospital accommodation was strained to the utmost during the greater part of the year, and another ward could easily have been filled.

The number of "return cases" of scarlet fever has been very small indeed. That such cases do occur is common knowledge, but perhaps it is too readily granted that they are always of Hospital origin. It is the general experience of most practitioners that similar cases occur in private houses, and, I believe, with equal frequency.

With regard to the fatal cases before and since Hospital Isolation has been practised, as well as among those treated at home, compared with those treated in Hospital, the results are invariably favourable to the treatment in the Fever Hospitals.

"SICKNESS AMONGST THE HOSPITAL STAFF."

It was to be expected that, living as they do, in an atmosphere impregnated with the germs of infectious diseases, that some of the nurses would fall victims to the disease they were daily in contact with.

This proved to be the case, three nurses contracting scarlet fever, one in a severe form; and another taking diphtheria. All, fortunately, recovered, and have resumed their usual duties.

There were other members of the domestic staff "off duty" with different complaints, but not contracted by following their calling of nursing infectious diseases.

Table showing the number of cases admitted into Hospital and deaths during the year 1906.

Date.	Scarlet Fever.	Diphtheria.	Typhoid.	Deaths.			
				Scarlet Fever.	Diphtheria	Typhoid.	Measles.
1906							
January ...	55	4	0	1	1	0	0
February ..	45	0	1	0	0	1	0
March	41	1	0	0	0	0	0
April	48	4	0	3	0	1	0
May	37	2	0	1	0	0	0
June	18	1	0	2	0	0	0
July	38	0	1	2	0	0	0
August	53	1	5	0	0	0	0
September .	43	1	1	1	0	1	0
October ...	46	0	4	1	1	0	1
November..	21	1	2	2	0	1	0
December .	19	2	0	2	1	0	1
Total ...	464	17	14	15	3	4	2
Tls... 495				Total .. 24			

Average number of days in Hospital—32.

SECTION VI.

The folloing tables show the number of houses, population, number of births and birth rates, the number of deaths and death-rates per 1000 of the inhabitants in the various wards in the Borough for the year 1906. The last column in Table xxxvii. contains the infantile mortality per 1000. Table xliii. gives the cases of notifiable diseases, including pulmonary consumption, divided into the various wards; also the density of the population of each ward per area. As is always the case the North, Thornhill, Kimberworth, and St. Ann's Wards show the worst figures. Wherever you get overcrowding, slum dwellings, and defective sanitary arrangements, the mortality rates invariably are the highest.

For the sake of comparison the figures for the year 1905 are printed side by side, and, as I remarked last year, show conclusively the weak spots in the sanitary administration of the Borough.

Our energies are being directed towards the improvement of the houses of the poorer classes but to deal effectively with the evil requires more than the staff we at present possess. The task at first sight appears a hopeless one, difficulties being met with in every direction.

The Female Health Visitor has paid during the last nine months 2748 visits to cases of various descriptions, including consumption, overcrowding, death inquiries amongst infants, deaths from measles, dirty houses, verminious and ragged children, visits to workshops where females are employed, visits to midwives, visits to deaths from whooping cough, birth inquiries, and other complaints too numerous to mention.

HOUSING OF THE WORKING CLASSES.

Powers ought to be granted to local authorities to acquire cheap and suitable land in anticipation of its future use when opportunity offered, and also those which referred to granting municipalities greater facilities and simpler procedure in dealing with lands in their suburban districts.

It is only in this manner possible to affect improvements in the unsatisfactory conditions existing in large towns which to-day are appealing so loudly for reform. Greater confidence should be extended to local authorities, who, after all, are the best qualified to judge of the needs of their own districts.

Table xliii. gives in addition the density of the population per acre. This table has been prepared for the first time, and is of great value, proving as it does the evil effects of overcrowding upon vital statistics.

Vast sums of money have to be spent in drainage and cheap tram fares. Money must also be spent in protecting inhabitants from unwholesome food, in parks and open spaces, and in the destruction of fever-breeding slums. The dividends from this expenditure

may not be measurable in money, but they are represented by the better health and the lower death-rate of a town, and the town becomes sweeter, more pleasant, and infinitely healthier.

TABLE XXXVII., 1906.

Ward.	No. of Houses.	Estimated Population.	Births.	Birth Rate.	Deaths.	Death Rate.	Deaths under 1 year.	Infantile Mortality Rate per 1000 births.
East.....	1011	5159	125	24	45	8	21	168
St. Ann's	1360	6944	192	27	100	14	30	156
Clifton	1079	5495	179	32	47	8	16	89
South.....	1282	6548	151	23	74	11	21	139
West	1035	5282	191	36	76	14	26	136
North	1553	8037	262	32	134	16	43	164
Thornhill	1624	8251	314	38	143	17	54	172
Masbro'	1630	8331	296	35	137	16	51	172
Kimberworth ..	1460	7453	231	30	119	16	36	155
Total	12034	61500	1941	—	875	—	298	—

TABLE XXXVIII. —1905.

Ward.	No. of Houses.	Estimated Population	Births	Birth Rate	Deaths	Death Rate	Deaths under 1 year	Infantile Mortality Rate per 1000 births
East.....	964	4893	156	32	42	8	12	77
St. Ann's	1268	6448	232	37	94	14	31	134
Clifton	1061	5378	126	23	48	8	10	79
South	1260	6410	169	26	66	10	13	77
West	1034	5252	168	32	59	11	18	107
North	1547	7981	270	33	107	12	44	162
Thornhill	1624	8236	293	35	117	14	41	139
Masbro'	1617	8240	277	33	93	11	34	123
Kimberworth ..	1420	7223	219	28	87	12	30	137

The figures do not include deaths in public institutions which have occurred inside or outside the borough of Rotherham and are not worked out to fractions of decimals.

TABLE XXXIX. 1906.

DEATHS IN THE VARIOUS WARDS UNDER ONE YEAR.

	E.	St.A	C.	S.	W.	N.	T.	M.	K.	W'kh'se H'spit'l.	Tot'l
Jan. ...	4	5	2	1	2	1			2	2	19
Feb. ...	2	2		2	3	2	4	2	2		19
March ..	1	2	2	1	1	1		7	5		20
April ...	1	1		2		3	5	3	1		16
May ...					2	3	6	5	4	1	21
June ...			2	2	3	1	3	3	2	1	17
July ...	3	4	1	1		4	3	2	1		19
Aug. ...	2	1	3	4	2	5	11	10	3	2	43
Sep. ...	5	8	1	5	4	6	13	9	5	1	57
Oct. ...		2	2	1	3	6	3		2	2	21
Nov. ...		2	2	1	2	2	1	6	6		22
Dec. ...	3	3	1	1	4	9	5	4	3		33
	21	30	16	21	26	43	54	51	36	9	307

TABLE XL. 1905.

DEATHS IN THE VARIOUS WARDS UNDER ONE YEAR.

	E.	St.A	C.	S.	W.	N.	T.	M.	K.	W'kh'se H'spit'l.	Tot'l
Jan. ..		3		3	1	8	5		2		22
Feb. ..	2	3	1		1	2	2	1	1		13
Mar.....	1			1	2	3	3	5	3		18
April ..	1	2	2	1	2	1	5	1	5		20
May ..	1	2	1		1	3	2	1	2	1	14
June ..		1	1		1	1	2		3		9
July ..	1	3	2	1	3	1	3	7	1		22
Aug. ..	1	3	1		1	5	10	4	1		26
Sept. ..	1	1		1	2	4	2	2	3		16
Oct. ..		3	1	1	1	5	4	4	1		20
Nov. ..		3	1	2	2	3	1	3	2	2	19
Dec. ..	4	7		3	1	8	2	6	6		37
	12	31	10	13	18	44	41	34	30	3	236

TABLE XLI. 1906.
DEATHS AT ALL AGES IN THE VARIOUS WARDS.

	E.	St.A	C.	S.	W.	N.	T.	M.	K.	W'house and H'spt'l.*	Tot'l
Jan. ...	6	7	3	5	6	7	9	9	8	14	74
Feb. ...	7	5	4	9	7	6	11	13	9	7	78
March ..	2	3	3	3	5	11	7	11	21	10	76
April ...	3	2	3	6	7	14	11	10	7	9	72
May ...	2	8	3	6	6	9	16	12	10	7	79
June ...		2	5	4	6	4	9	6	7	14	57
July ...	6	11	1	4	2	14	6	4	2	12	62
Aug. ...	4	10	8	7	2	10	19	14	7	9	90
Sep. ...	7	17	5	13	12	13	19	14	10	11	121
Oct. ...	1	10	4	5	12	9	11	11	12	10	85
Nov.	1	11	5	9	2	13	6	22	13	13	95
Dec. ...	6	14	3	3	9	24	19	11	13	14	116
	45	100	47	74	76	134	143	137	119	130	1005

TABLE XLII.—1905.
DEATHS AT ALL AGES IN THE VARIOUS WARDS.

	E.	St.A	C.	S.	W.	N.	T.	M.	K.	W'house and H'spt'l*	Tot'l
Jan. ..		10	4	13	7	13	15	9	9	9	89
Feb. ..	7	7	4	6	4	9	9	9	8	12	75
Mar.	3	7	6	6	3	5	10	8	5	6	59
April ..	3	6	6	6	5	4	14	3	13	9	69
May ..	5	5	3	3	4	4	10	6	6	10	56
June ..	2	7	4	4	2	6	4	6	11	9	55
July ..	4	8	4	4	8	7	7	12	6	6	66
August	4	9	5	1	3	9	15	7	4	3	60
Sept. ..	2	2	2	4	6	12	5	3	8	5	49
October	3	10	6	7	3	11	13	11	2	6	72
Nov. ..	3	8	4	7	5	16	5	12	5	16	81
Dec. ..	6	15		5	9	11	10	7	10	12	85
	42	94	48	66	59	107	117	93	87	103	816

* This column gives deaths at the three public institutions, the Workhouse, Hospital, and Isolation Hospital.

TABLE XLIII.

Table showing the Density of the Population of each of the several Wards, together with the number of cases of Infectious Diseases and Pulmonary Consumption occurring in each Ward during 1906.

Name of Ward.	No. of Houses.	Population.	Acreage.	Density per acre.	No. of cases notified during 1906				
					Measles.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Pulmonary Consumption
East.....	1011	5159	480	10.74	20	37	2	1	2
St. Ann's .	1360	6944	131	53.00	81	66	17	6	10
Clifton ...	1079	5495	524	10.48	16	37	5	2	4
South	1282	6548	436	15.10	13	74	4	6	5
West	1035	5282	530	9.96	8	95	5	5	8
North	1553	8037	318	25.27	87	106	6	17	7
Thornhill .	1624	8251	196	42.09	54	112	10	10	14
Masbro' ..	1630	8331	412	20.22	96	57	4	13	11
Kimberw't	1460	7453	2968	2.51	33	73	9	6	3
	12034	61500	5995		408	657	62	66	64

TABLE XLIV.

Cases of Infectious Disease removed into Hospital from the various Wards during 1906.

	East	St. Ann's	Clifton	South	West	North	Thornhill	Masbro'	Kimberworth	Total
Diphtheria ..	3	1		1	1	1	4	3	3	17
Scarlet Fever ..	18	46	27	51	75	83	71	51	42	464
Enteric Fever ..		1		2	2	3	1	5		14
	21	48	27	54	78	87	76	59	45	495

TABLE XLV.

Number of Cases of Infectious Diseases reported in each Month of the year 1906.

	Scarlet Fever	Diphtheria	Membranous Croup	Enteric Fever	Continued Fever	Puerperal Fever	Erysipelas	Small Pox	Relapsing Fever
January ..	75	14	1	4			5		99
February ..	56	6	1	3		1	4		71
March ..	56	7		4			6		73
April ..	65	6		3			7		81
May ..	58	3		1			9		71
June ..	37			5			8		50
July ..	54	2		5			3		64
August ..	67	3		8			3		81
September ..	53	6		8			4		71
October ..	66	3		10			8		87
November ..	34	6		9	1		8		58
December ..	36	6	2	6			6		56

TABLE XLVI.

DIPHTHERIA.

Number of Cases occurring each month in the various Wards.

	Total.	East.	St. Ann's.	Clifton.	South.	West.	North.	Thornhill.	Masbro'.	Kimberworth.
January	14	2	3	1			2	4		2
February	6		3		1					2
March	7		1	2	1	1		2		
April	6				1		1	1	2	1
May	3					1		1		1
June	—	—	—	—	—	—	—	—	—	—
July	2		1							1
August	3		2						1	
September	6		3				1	1		1
October	3					1	1			1
November	6		2	2	1	1				
December	6		2			1	1	1	1	
	62	2	17	5	4	5	6	10	4	9

TABLE XLVII.
ENTERIC FEVER.

Number of Cases occurring each month in the various Wards.

	Total.	East.	St. Ann's.	Clifton.	South.	West.	North.	Thornhill.	Masbro'.	Kimberworth
January	4			1		1		1	1	
February	3						2	1		
March	4		1				1	1		1
April	3			1			1		1	
May	1				1					
June	5		1				1	2	1	
July	5		1				1	2	1	
August	8					1	1	1	4	1
September	8	1	1		1	1	2	1	1	
October	10		1		3	1	3	1	1	
November	9		1		1	1	2		2	2
December	6						3		1	2
	66	1	6	2	6	5	17	10	13	6

TABLE XLVIII.
SCARLET FEVER.

Number of Cases occurring each month in the various Wards.

	Total.	East.	St. Ann's.	Clifton.	South.	West.	North.	Thornhill.	Masbro'.	Kimberworth.
January	75	3	5	1	7	6	20	18	6	9
February	56	3	3		8	3	16	9		14
March	56	3	4	3	5	7	7	13	6	8
April	65	2	8		7	5	13	7	4	19
May	58	2		3	6	7	9	16	13	2
June	37	3	3	1	4	6	6	7	4	3
July	54	1	4	5	6	21	3	9	2	3
August	67	10	4	5		21	16	5	1	5
September	53	3	10	2	4	7	7	12	6	2
October	66	4	10	9	16	6	2	6	10	3
November	34		11	6	3	2	4	3	2	3
December	36	3	4	2	8	4	3	7	3	2
	657	37	66	37	74	95	106	112	57	73

TABLE XLIX.

Return of the number of cases of Infectious Diseases reported to the Medical Officer of Health during the year 1906, and of deaths from the diseases notified.

	Cases notified in 1906.	Deaths registered in 1906.
Scarlet Fever	657	24
Diphtheria	62	7
Membranous Croup	4	3
Enteric or Typhoid Fever	66	8
Continued Fever	1	—
Puerperal Fever	1	1
Erysipelas	71	1
Pulmonary Consumption	64	36

PHTHISIS: CONSUMPTION OF THE LUNGS.

This disease was responsible for thirty-six deaths last year, as compared with forty-five for the year 1905. Thirty-one of these occurred between the ages of 15 and 60. The death-rate per thousand of the population was .58, against .75 in 1905. The death-rate from this cause has been reduced 75 per cent within the last 30 years. Doubtless, with improved sanitation and the prevention of the spread of infection the mortality will be still further reduced in future years. It is calculated that at present each existing case infects at least one other person. According to the recent report of the Royal Commission on the causation of Phthisis, tuberculous meat and milk are important factors in its production, and that more stringent measures will in future have to be enforced to prevent the sale or the consumption of such meat and milk.

It is always in youth and early adult life that we find persons first attacked, and out of 247 deaths from all causes in Rotherham, between the ages of 15 and 60, 31, or about one-eighth were due to phthisis, a remarkable reduction as compared with the previous year. Is it possible that the initial efforts made by the Rotherham Sanitary Authority during the year 1906 can have been responsible for this remarkable reduction? If this is so, our efforts should be redoubled in this direction, for it must always be remembered that nearly all these deaths occur during the wage earning periods of life.

Consumption is a preventable disease, and in its early stages, in the majority of cases, curable. Of these facts there is not a shadow of a doubt, and if a case be taken in its incipient stages it will result in a renewal of good health and working capacity.

Voluntary notification of this disease was, on my suggestion, adopted in April, 1906. Up to December 31st, 1906, 64 cases were notified by the medical men practising within the Borough. Probably 25 per cent. were not notified, the main cause of the disinclination to notify Phthisis is the obvious one that the medical attendant fears that his patient may dispense with his services. He dreads to offend by bringing the patient into contact with the Sanitary Authority, and troubling him with the official visits which necessarily follow. He fears that the patient will leave him for another medical man, who has the reputation for not notifying such cases. As a result even those who notify cases tend to report only those cases which it is no loss to lose as patients, or those who are nearly moribund. The question is a difficult one, for the medical man is largely dependent on the goodwill of his patients for a living, and it seems to me that the Legislature should take away from a doctor this necessity of choice between the interests of his pocket and his desire to improve the Public Health.

Compulsory notification in all cases, as in the chief infectious diseases, would solve the difficulty, as the patient would not escape notification by leaving one medical man for another.

It is quite true that there is a difficulty in bringing phthisis into line with the other acute infectious diseases, and, indeed, many of the requirements of the law dealing with them are not applicable to this disease. Such a difficulty could easily be obviated by a special Act dealing with tuberculosis, and that it can be met, is shown by the example of the neighbouring City of Sheffield, which has succeeded in obtaining such a measure in its last local Act.

I trust that a clause making pulmonary tuberculosis a compulsory notifiable disease will be included in the next Bill which Rotherham may bring before Parliament.

It would be a great advantage to know where all the cases of phthisis in a town exist, for although a considerable amount of good can be done by the instruction of individual cases notified, any general conclusions based on an imperfect knowledge, are necessarily of doubtful value, and general measures against the disease are likely to fail, owing to ignorance of the essential factors of the problem. Consumption being largely present amongst the poor classes, the people must themselves be educated as to the best means to be adopted in dealing with any member of the family who is consumptive. In a great many instances the open air treatment can be carried on at home and isolation arranged for. A most extraordinary thing is that Friendly Societies throughout the whole of England, almost without exception, evince no special interest in the erection of Sanatoria, though they are the people who would receive the greatest benefit, and whose funds must be most depleted by the ravages of this disease. I hold a strong belief that in years to come Pulmonary Tuberculosis will be as rare as small-pox is now. The death-rate from the disease has been reduced within the last 50 years, at least 75 per cent. This has been accomplished by improving sanitation in homes occupied by this class of patient, and without any serious attempt at notification or the special instruction of the patient.

All the sanitary work which has been accomplished during the last fifty years will, I firmly believe, pale into insignificance when compared with the work which could be done under suitable conditions, in proper hospitals, in connection with the treatment of consumption.

It devolves, therefore, on Sanitary Authorities to take steps—as Rotherham is doing—to train and educate public opinion in these matters, so that every possible chance may be given to infected people.

TABLE XLIXa.

Death-rate from Phthisis in Rotherham per 1000 during the last 30 years:—

1876	.....	2.2
1886	.....	1.2
1896	.....	.90
1906	.....	.57

The cancer death-rate, unlike consumption, is stationary.

TREATMENT OF CONSUMPTION IN INSTITUTIONS.

THE WORKHOUSE is at present the only place where anything of the kind is attempted. The male consumptive patients have a special ward assigned to them, and open-air treatment is carried out as far as circumstances will permit. The difficulties in the way are, however, considerable. The ward is not well suited to the purpose, and it is often, in common with the rest of the hospital, overcrowded. The grounds outside are very hilly, and are exposed to wind, so that the patients often find it difficult to take outdoor exercise. Finally, there is the objection that cases seriously ill and dying have to occupy the same ward as incipient cases, which not only has a very depressing effect, but exposes convalescent cases to the constant danger of re-infection.

The number of phthisical cases treated in this ward during the year was 28, and of these 12 died, nine were discharged more or less improved, three were re-admitted, and 10 remained under treatment at the end of the year. The high death-rate is accounted for by the fact that most of the cases were in an advanced stage on admission, and several, indeed, were practically dying. It is impossible, therefore, in any, to compare the results with those obtained in Sanatoria, where only early cases are taken.

The history of most of these Workhouse cases is briefly as follows:—A young man, between 20 and 35, is attacked by the disease. He consults a doctor, who, amongst other things, advises him to take nourishing food and cod-liver oil. For a time he may be able to obtain these, but, as his powers for work diminish and his resources become exhausted, he is only able to obtain the barest necessities. Eventually he has to give up work entirely, and, as a last resource, applies for admission to the Workhouse, where he arrives in an emaciated condition and with the disease far advanced.

Such cases often show a marked improvement for the first few weeks after admission, and, on the special diet provided, often put on weight at the rate of two or three pounds a week. In a certain number of cases the disease is brought to a standstill; but usually before the full amount of benefit is obtained, the patient feeling himself improved takes his discharge, to return in a few weeks in a worse state than ever.

The Workhouse must remain as a place of treatment for advanced cases, for early cases will seldom go there, and it is not desirable that they should if any other place is available.

A few suitable cases have, on my recommendation, been sent to Sanatoria by the Guardians, with good results.

SANATORIUM TREATMENT OF CONSUMPTION.

The objects aimed at in Sanatorium treatment are:—

- (1) The cure or palliation of the disease.
- (2) The education of the patient, as regards diet, mode of living, disinfection of sputum, etc.
- (3) Isolation of the patient.

The advantages are that the patient is placed in the most advantageous position to fight the disease, and, at the same time, has to submit to strict rules and regulations as to diet, rest, and exercise, etc., carefully thought out for every hour of the day.

I consider that one of the blocks of the Borough Isolation Hospital might, when not in use for other purposes, be very suitably and usefully employed for the sanatorium treatment of consumption, for a limited number of cases. The construction of the wards is adapted to the purpose, and the situation of the Hospital is favourable. There is plenty of open space round about, and, if one or two shelters were erected, the grounds are all that could be desired.

Epidemics of scarlet fever occur, as a rule, once in every three or four years, and in the interval part of the Hospital is likely to be unoccupied. The work could very well be undertaken by the present staff, and the isolation of the cases of phthisis from the other diseases in the Hospital would be no more difficult than the isolation at present of typhoid from scarlet fever.

If suitable cases were chosen, much good might be done in the three ways indicated above. The chief benefit, perhaps, would be that, even if the time in hospital were limited in each case to two or three months, the patient at the end of that time would be able to return to his home thoroughly trained in the methods of combating the disease, and preventing infection from spreading to others.

By limiting the time spent in Hospital, a considerable number of cases could be dealt with, and the lessons of prevention and cure could be brought home much more effectually and practically, than is possible by the means at present employed.

The scheme is a simple one, it has been tried with success in other places, and is well worthy of serious consideration.

SCHEME FOR ESTABLISHMENT OF A SANATORIUM FOR CONSUMPTIVES.

1. The Corporation to take on lease from the Feoffees of the Common Lands of Rotherham, on a yearly tenancy, at an annual rental of £18, the land in Badsley Moor Lane, consisting of $3\frac{1}{2}$ acres, upon which the temporary Isolation Hospital now stands. To properly equip this site it is necessary that the land should be drained, and that a fence of a height of about nine feet should be erected on

the north and east sides, and that all sides of the land should be planted with fir trees. Asphalte or gravel walks will also be required to be made. The estimated cost of laying out the land will be £100.

2. The corrugated iron building erected upon the land, and formerly used as a temporary Isolation Hospital, to be properly disinfected and altered and fitted up as an Administrative Block for the accommodation of the nursing staff and for the patients during the day time. It would require to contain Recreation Rooms for Patients of both sexes, Dining Room, Kitchen, etc. All meals to be prepared at the Isolation Hospital and conveyed to the Sanatorium. Cleaning to be done from the Isolation Hospital. The estimated cost in connection with the Administration Block is £250.

3. The Corporation to purchase 10 sleeping chalets (each for one patient only), and these chalets to surround the Administrative Block. Each chalet to have a floor space 10 feet square, with windows opening in all four directions, and to be raised on blocks of wood or stanchions to permit of air circulation beneath the floor. A verandah four feet in depth to face the south-west to be arranged in each chalet, upon which the patients may sit or recline in preference to congregating in a general room with other patients. The advantage of the chalet system is its elasticity, for single chalets can easily be added from time to time, and there is no difficulty in managing a large chalet Sanatorium. The estimated cost of each sleeping chalet is £30.

4. The staff of the Sanatorium to be under the superintendence and direction of the Medical Superintendent and Matron of the Isolation Hospital. The number of nurses at the outset need not be large. It can be increased from time to time as circumstances require.

5. All patients in the Borough who are willing to be removed to the Hospital to be removed there immediately they are found to be suffering from pulmonary consumption.

6. Patients, or their parents, or guardians, who can afford to pay for their accommodation and treatment at the Sanatorium to pay the sum of £2 2s. per week, or such lesser amount as, in the opinion of the Committee, their circumstances afford.

7. Suitable patients from the Workhouse Hospital to be also removed to and treated at the Sanatorium, the Guardians paying the Corporation in respect of each case so removed and treated the sum of £2 2s. per week.

8. The control and administration of the Sanatorium to be solely in the hands of the Corporation, who shall delegate their work to the Hospital Committee in the same manner as is now done in respect of the Isolation Hospital.

9. The Medical Superintendent of the Isolation Hospital to attend all patients at the Sanatorium.

5. PRESENT DAY TREATMENT.

Take a typical case of a workman earning, say, £2 a week, and living with his wife and children in modest comfort. He has a good home, neatly furnished, and he is devoted to his work and to his domestic joys. He is honest, industrious, and, given good health, an ideal citizen; but one day he realises that there is something wrong. He has felt tired and languid of late, and is getting thinner and when he hurries or walks uphill he soon gets short of breath. So he decides to see the Club Doctor, who examines his chest, and tells him that he ought to get an "out-patient letter" for one of the chest hospitals. He goes to the Hospital and is ushered into the presence of a physician, whose advice he has come to obtain. He is questioned, and examined physically, the bacteriological test of his expectoration is made, and he is informed that he is suffering from pulmonary tuberculosis. He is given a paper, with directions, and a quart bottle of medicine, and is told to come again in 14 days.

6. A SAD PICTURE.

The man returns home dejected, and takes the directions from his pocket and reads them. He is told therein that he is consumptive, and that he is a danger to himself, to his wife and family, and to his fellow-workmen. He realises that his working powers will soon fail him, that his companions at the workshop will be afraid of him, and that he will, before long, lose his situation altogether, and be dependent upon his scanty savings and the temporary pay from his Club, supplemented, perhaps, for a while, by the assistance of relatives or gifts from charitable persons. After a few months the man is still at work, his cough is worse, and he is weak, emaciated, and hollow-eyed. He still visits the Hospital once a fortnight, and is still given his quart of useless medicine. "You must feed up, my good man," said the physician, take plenty of good nourishing food, and live night and day in the open air; avoid sudden exertion, and don't worry."

You might just as well tell the man to go for a cruise in his yacht, or take a trained nurse and a valet and spend the winter in Switzerland.

7. THE DESCENT TO POVERTY.

Later we find the patient bedridden and helpless, occupying one room shared at night, and perhaps by day as well, by his wife and children. By this time poverty has transformed the once comfortable and neat home into an ill-furnished, ill-kept, and comfortless place. Very soon it becomes impossible to pay the rent, and the family find themselves the occupants of a single room; and now, if not before, each and every member of the family is running grave risk of contracting the disease, and the number of consumptives is likely to be increased, to the real detriment of the community at large.

At last the end comes, and the patient is received into a pauper grave, his unhappy family becoming a charge upon the rates. His widow, broken in health, and infected with tuberculosis, soon follows her ill-fated husband along his dismal road leading through the wards of the workhouse infirmary to a nameless grave in a Poor Law Cemetery. And so two lives, at least, have been wasted, and the community has been robbed of the services of two useful adults, and has become responsible for the maintenance of a young family, more than one member of which is probably infected with tuberculosis. And yet the whole tragedy might have been averted, as 10,000 similar ones might be, if only a little intelligence were directed to a problem which is one of the most pressing questions of the day, and yet susceptible of a ready and an early solution.

8. VALUE OF A LIFE.

A healthy, sober, and industrious man is surely worth £200 to the community. His untimely death costs a larger sum, since the support of a young family has often to be met; and we, therefore, contend that it would pay well to provide early and efficient treatment for incipient consumption, and that this is of importance only second to the prevention of the disease. It is surely more than worth while in England to save incipient consumption by the provision of Sanatoria and by educating the people as to the advantage of open air methods, when by so doing we are not only saving life and health, but at the same time hastening on the final extinction of tuberculosis."

(The Hospital).

Sixty-four cases of consumption have been notified up to December 31st, 1906. All these have been visited, and most of them re-visited. Where patients have been in an advanced stage, monthly visits have been paid at far as possible, and the bedrooms sprayed with formalin. Advice has been given as to the necessity for cleanliness, fresh air, rest, and good nourishment, and the advantage to both patient and relatives of having separate beds and if possible separate rooms. The cases are distributed through the wards as follows :—

TABLE L.

St. Ann's.	West.	Thornhill.	South.	Kimberworth.	North.	Clifton.	Masbro'.	East.	Total.
10	8	14	5	3	7	4	11	2	64

TABLE LI.
CONSUMPTION, 1906.

Number of cases notified.		Re-visits.	Disinfection of bedrooms.		Male.	Female.	Stage.		Spittoons supplied.	1st cases of consumption in families.	Cases where other members of family have had con.	Overcrowded houses.	Dirty houses.	Patients using separate beds.	Patients using separate beds and rooms.	No separate bed or room.	Deceased.
Number of cases notified.	Visits (first).						Advanced.	Preliminary.									
64	64	100	97	36	28	29	35	34	34	30	8	3	40	18	24	14	

VIOLENT DEATHS.

Thirty-seven persons died during the year, as a result of accident, against 25 for the previous year. Of this number, four were due to burns and scalds. Eight deaths were due to drowning, and it is now a satisfactory thing to report that the unfenced portion of the canal, popularly known as the "death trap," has at last been properly protected. The deaths from drowning in future years, in consequence, should show a decrease, as this portion of the canal has in the past claimed a large number of victims.

It is a curious fact that the deaths from overlaying and suffocation of babies in bed are always twice as numerous at the "week-end" than at any other time during the week.

During the year there was one death due to murder and one to manslaughter. At the subsequent trial the murder charge was reduced to manslaughter, and the man charged with manslaughter was acquitted. The number of deaths reported by the police to the Coroner was 111, and the number of inquests held was 69. The percentage of inquests to deaths being 6.8, a rather high proportion.

LEAD POISONING.

There have been no deaths from lead-poisoning, due to the metal being absorbed into the system, in the various industrial processes in the Borough, where lead is rather extensively used in several manufactures. The recent regulations for the periodical monthly examination of workers in lead and other poisonous metals is probably responsible for the absence of any deaths from this complaint. The measures already adopted might even be made more stringent.

TABLE LII.

Deaths in Rotherham Hospital and Rotherham Workhouse from the following districts outside the Borough :—

Name of District.					No. of Deaths.
Aberdeen	..	..	..	..	1
Bramley ..	..	..	..	..	1
Brampton Bierlow	..	..	..	..	1
Brinsworth	..	..	..	..	3
Catcliffe ..	..	..	..	..	2
Greasbro'	..	..	..	..	3
Hooton Levitt	..	..	..	..	1
Kilnhurst	..	..	..	..	2
Maltby ..	..	..	..	..	1
Parkgate	..	..	..	..	8
Rawmarsh	..	..	..	..	11
Swinton ..	..	..	..	..	3
Tinsley ..	..	..	..	..	3
Thrybergh	..	..	..	..	2
Treaton ..	..	..	..	..	3
Wath ..	..	..	..	..	4
Wentworth	..	..	..	..	1
West Melton	..	..	..	..	3
Whiston ..	..	..	..	..	3
					—
					56
					—

BACTERIOLOGICAL WORK.

The work of this department has been greatly facilitated by the furnishing of a laboratory in the new Health Offices with the appliances necessary for the bacteriological diagnosis of disease. It has thus been possible to investigate a larger number of specimens than in former years, 380 examinations having been made, as compared with 288 in 1905.

The majority of the specimens were sent in by the medical practitioners of the Borough, but a considerable part of the work was that done in connection with the Borough Isolation Hospital, where it has been found of great value in the diagnosis of doubtful cases, and also in ascertaining the freedom from infection of diphtheritic cases before their discharge. In several cases diphtheria was by this means discovered in the throats of patients admitted with scarlet fever, and, by promptly isolating them, no further spread of the disease took place.

Ninety-three examinations were made of the sputa of tubercular patients, most of them in connection with the new scheme of notification and supervision of consumptives.

Besides the examinations in connection with diphtheria, typhoid, and tuberculosis, which form the chief part of the work, other specimens have been dealt with, such as samples of milk, portions of diseased carcasses from the slaughter-houses, and in a suspected case of glanders in a horse the bacillus of the disease was discovered.

The increased number of specimens sent in by the medical men is a proof that the assistance given in this department in the early diagnosis of disease is being appreciated by them.

TABLE LIII.

	Positive.	Negative.	Total.
Diphtheria	93	147	240
Typhoid	15	16	31
Tubercle	50	43	93
Others	—	—	16
			380

TABLE LIV.

Number of houses certified for occupation, 1906 :—

Kimberworth Ward	..	..	..	..	40
North Ward	..	..	..	..	6
Thornhill Ward	..	..	..	..	—
St. Ann's Ward	..	..	..	..	92
East Ward	..	..	..	..	47
Masbrough Ward	..	..	..	..	13
West Ward	..	..	..	..	1
South Ward	..	..	..	..	22
Clifton Ward	..	..	..	..	18
Total	..	..	..	..	239

SECTION VII.

WATER SUPPLY.

We are now getting our maximum supply from Langsett, 750,000 gallons per day. The water is of excellent quality and perfectly free from any dangerous organic contamination. It is at times of a somewhat dark appearance, due to peaty matters in solution from the Derbyshire moors. A Sub-Committee has been appointed to deal with the question of the filtration of this water, in order to remove this discolouration, and steps will probably be taken in the very near future to carry out their recommendations.

The auxiliary supply from the Pinch Mill spring is not so satisfactory. When we obtain our share of water from the Derwent Valley perhaps it may be possible to discontinue using this water for domestic purposes. The same remarks apply with equal force to the Aldwarke spring, which is used, so I understand, as a source of domestic supply, as occasion demands.

TO THE HEALTH FILTRATION SUB-COMMITTEE.

The Sub-Committee appointed to visit certain towns to investigate the working of the Candy Filter have to report that they have visited the works of the West Gloucestershire Waterworks at Frampton Cotterell, near Bristol, the works of the Cardiff Corporation at the Heath, near Cardiff, and the works of the Pontypridd Waterworks Company in the Rhondda Valley.

The deputation was courteously received at the West Gloucestershire Waterworks by Mr. Andrews, the Secretary and Manager, who explained that the water supplied by his Company was pumped from an old disused iron mine, and at times was very badly discoloured by reason of the roof of the mine falling in and mixing with the water. The Company had been greatly troubled for many years, and at times very numerous complaints were received as to the condition of the water. As far as he personally was concerned it had given him very great anxiety from time to time. For some years his Company endeavoured to find a filter to deal with the discolouration in question, but they failed to discover a satisfactory filter until he learned of the Candy Filter. He visited the waterworks at Hastings, where the water is very much discoloured by oxide of iron, and on seeing the excellent way in which the Candy filters dealt with that water he reported favourably to his directors, and a battery of eight, dealing with two million gallons per day, was put down. The results have been eminently satisfactory, the water as filtered being perfectly clear, and he had had no difficulty whatsoever. The cost of maintenance was small. The water on the occasion of the visit of the deputation was not discoloured, and therefore the Committee were unable to see the results under bad conditions. Mr. Andrews kindly had one of the filters washed out by the man in charge, and

the washout was very much discoloured, being almost mahogany colour. The filters certainly appeared to work very satisfactorily at these works.

The deputation next visited Cardiff Waterworks, at the Heath, near Cardiff, where there are a number of sand filter beds laid down, and a battery of four Candy filters dealing with one million gallons per day. The deputation was received by Mr. C. H. Priestley, the Waterworks Engineer, who explained the working of the filters, and stated that his Committee had adopted them after very careful investigation. The Cardiff water was received from the Breconshire Beacons, which was a peaty gathering ground. It was, to a certain extent, discoloured by the peat, particularly in flood times. After investigating and seeing the results of filters already in operation his Committee had decided to put in the present battery, and the results had been in every way satisfactory. The capital cost of the Candy filter, with the necessary buildings, etc., was £1800, as against a cost of £3,500 for sand filters, dealing with an equal quantity of water. As to the cost of maintenance, he put the cost of sand filters at 5s. per million gallons. The cost of the Candy filter was not 1s. per million gallons. The deputation were shown the working of the filters, and were enabled to examine columns of filtered and unfiltered water through long glass tubes. Whilst it was impossible to see through the tube of unfiltered water, one could see quite clearly through the tube of filtered water. Mr. Priestley stated that as far as his Committee were concerned they did not propose to put down any more sand filters, the Candy being more effective than sand.

The deputation on the next day visited the waterworks of the Pontypridd Waterworks Company, situate in the Rhondda Valley. They were very courteously received by the Engineer and Manager, Mr. William Jones, who also explained thoroughly the working of the filters. Whilst the water at the present time was hardly at all discoloured, Mr. Jones explained that in times of drought it was very much discoloured by the peat and by oxide of iron, and this was clearly shown by the bed of the streams which the deputation saw. Mr. Jones stated that the effect of the Candy filter was to make the water perfectly clear. The filters had given every satisfaction so far as he was concerned, and his Company were on the point of constructing another eight, which would make the total number necessary to deal with a quantity of three million gallons per day.

Mr. Jones was emphatically of opinion that the Candy Filter was quite the best mechanical filter in operation, that it did its work excellently, and stated that his Company, although authorised by Parliament to expend £20,000 on sand filters, had decided not to put down any such filters, but to extend the Candy system.

The deputation, from the careful inspection they made of these filters at the three towns in question, are unanimously of opinion

that they are a very effective filter, and would deal admirably at a moderate cost with the discolouration of the Rotherham water. The deputation believe that if these filters are put down the water would be quite clear, and there would be no cause for further complaint, and they recommend that this be done.

SHALLOW WELLS.

A shallow well, which was found by analysis to be badly polluted, and used as a source of domestic supply for six houses, in Broom Valley, has been condemned, closed, and filled up. These houses are now supplied with the town water.

TABLE LV.

PARTICULARS OF RAINFALL FOR 1906.

	Number of wet days.	Total Rainfall in inches.
January	16	2.94
February	13	2.58
March	12	1.26
April	5	.47
May	13	1.39
June	9	1.84
July	7	1.03
August	8	1.01
September	4	.68
October	20	4.48
November.....	12	2.01
December	13	1.59
Totals	132	21.28

The Sewage Works have been in effective operation throughout the year, the most important incident being the completion of a new sprinkler filter, 114 ft. dia., in July. This filter is fed with the settled sewage as it leaves the tanks, and is, I am glad to say, giving splendid results.

The Thorpe Sewage Works continue to give satisfactory results. The average purification effected for the year between the crude sewage and the outfall being 93.8%.

The wettest day of the year was February 27, when the rainfall was 1.43 inches.

TABLE LVI.

Statement of the wettest day in each month of 1906 :—

Date.					Rainfall.
January 5th..	..	..	..	..	.61 inches.
February 27th	..	..	..	..	1.43 „
March 1st ..	..	..	..	..	.23 „
April 22nd ..	..	..	..	..	.21 „
May 19th ..	..	..	..	..	.36 „
June 28th ..	..	..	..	..	.39 „
July 30th ..	..	..	..	..	.51 „
August 24th..	..	..	..	..	.39 „
September 13th	..	..	..	..	.33 „
October 18th ..	..	..	..	..	.91 „
November 8th	..	..	..	..	.46 „
December 15th	..	..	..	..	.45 „

TABLE LVII.

Total Number of cases of sickness reported to the Education Authority during 1906 :—

			Measles	Whooping Cough	Chicken Pox	Mumps.	Ringworm
January	..	..	12	15	29	58	22
February	..	..	26	19	32	68	28
March	..	..	37	21	28	45	32
April	.	..	6	9	25	12	21
May	..	..	18	16	30	13	30
June	..	..	34	24	34	18	41
July	..	..	113	26	14	14	28
August	..	..	..	..	..	..	..
September	..	..	70	64	7	7	13
October	..	..	131	30	5	11	19
November	..	..	210	35	11	16	10
December	..	..	132	53	8	15	17
			789	312	223	277	261

COMMON LODGING-HOUSES.

These, eight in number, have been regularly visited by the Inspector appointed for the purpose during the year. I have, at intervals, personally inspected them. I have found the majority in a fairly good condition, and suitable for the purposes for which they are used. It is interesting to note that one—in Pigeon Lane—is the property of the Rotherham Corporation.

There are also a very large number of furnished houses let in lodgings, i.e., one-roomed dwellings within the Borough. These are receiving the attention of the Health Department, and, when our new Bye-laws, for the better government of the town, are in full working order, the necessary overcrowding, which always follows the sub-letting of houses, will be diminished.

Several notices have been served on owners and occupiers with a satisfactory result.

PUBLIC BAKEHOUSES.

These also have been regularly visited during the year, and have been found in good order.

THE FEMALE HEALTH VISITOR'S REPORT.

The total number of visits paid, from April 9th to December 31st, 1906, are 2748. There are many dirty houses, and usually neglected children are found in them—badly nourished, dirty, verminous, or ragged. Overcrowding, too, is general. Whole families will congregate in one or two rooms for living and sleeping purposes, when one, two, or more rooms in the house remain empty. The ideas on ventilation are very vague, the tendency being to stop up all crevices, or any chimney not in use, with rags, paper, etc. I am repeatedly told they feel better in the confined air, because they are warmer. Many houses are taken by one family, who then let off one or more rooms to other families. Seventy-five of these cases have been under my notice, but, with seven exceptions, notices for overcrowding have not been required, as the people promised to get other accommodation within a given time, and fulfilled the promise. The notices also were complied with within the specified time.

WORKSHOPS.

Forty-one workshops, where females are employed, have been visited; also the homes of the out-workers. All the rooms were well ventilated and fairly clean, and, where gas was used for the heating of irons, outlets were provided for the fumes. Good prices are paid for home work, and no sweating has been found. In three cases attention was drawn to the dirty condition of the sanitary conveniences, but all were cleansed, and have been maintained in a better condition since.

TABLE LIX.

Annual Report of the Medical Officer of Health for the year 1906 for the County Borough of Rotherham on the administration of the Factory and Workshop Act, 1901, in connection with Factories, Workshops, Laundries, Workplaces, and Homework.

INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Inspections.
Workshops (including Workshop Laundries	355
Workplaces (other than Outworkers, premises included in Part 3 of this Report)	
Total	355

HOMEWORK.

Nature of Work.	Lists.	Outworkers.	Number of addresses of outworkers received from other Councils.	Number of Inspections of outworkers premises.
Wearing Apparel :—				
(1) Making, &c.	2	3		8
File making			1	
Total	2	3	1	8

REGISTERED WORKSHOPS.

Workshops on the Register at the end of the year.	Number.
Bakehouses	6
Total number of workshops on Register ...	157

SANITARY INSPECTOR'S REPORT.

(To the Chairman and Members of the Health Committee.)

Gentlemen,—I have the honour of submitting to you my report of the work accomplished by the staff during the past year.

The districts have been constantly inspected, and complaints and defects attended to. The cleansing has been carried out as usual, and 845 loads more of refuse collected than during the year 1905. Out of the 21,755 loads collected, only 1207 loads have been taken by farmers as manure; 14,584 loads have been put through the destructor, and 5964 tipped. When the proposed new destructor is decided upon, I hope it will be of such a construction as to deal with the whole of the refuse collected, and also to meet the requirements of future years to a limited extent.

PRIVIES AND ASHPITS.—The total number of privies converted into water closets and new closets constructed in place of old privies number 289, as against 205 during the previous year.

Other nuisances, together with the slaughter-houses, lodging-houses, markets, workshops, cowhouses, milk shops, infectious diseases, have all received attention as will be seen in following tables.

The Diseases of Animals Acts have had a fair amount of attention, owing to the several outbreaks of swine fever, and the various regulations for the movement of swine from Ireland and from districts outside the East and West Ridings. We have also had one case of glanders, the only one for many years.

In December, 1905, the Borough was, by order of the Board of Agriculture and Fisheries, declared a swine fever infected area, and at the commencement of the year the Swine Fever (Infected Areas) Order, 1902, was still in force. This Order continued in operation until March, and during this time five hundred and ten licences were granted, a similar number of copies of the licences being forwarded to the Board.

Upon the revocation of the Swine Fever (Infected Areas) Order the Rotherham (Swine Fever) Order immediately came into force, and together with the Swine Fever (Movement from Ireland) Order continued in operation until the end of the year, six hundred and eighty-five licenses being granted under these Orders.

Twelve suspected case of Swine Fever have been reported to the Board of Agriculture and Fisheries during the year, three proving genuine outbreaks upon examination by the Board's officers.

TABLE I.
CANAL BOATS.

The total number of boats inspected during the year was 50, as compared with 54 during 1905. The number of children found on board was 17 as compared with 21 during the previous year. No case of infectious disease was found on the vessels and no infringement of the regulations.

The children occupying the boats and their respective ages were as follows:—

1 year and under	...	...	...	...	5
3 years	...	...	...	...	3
5 years	...	...	...	...	1
7 years	...	...	...	...	2
8 years	...	...	...	...	2
9 years	...	...	...	...	2
14 years	...	...	...	...	2
					<hr/>
					17

TABLE II.
INFECTIOUS DISEASES.

The total number of notifications of infectious diseases received at the office has been 862, as follows:—

Small-pox	...	...	...	...	—
Scarlet Fever	...	...	...	...	657
Diphtheria	...	...	...	...	62
Membranous Croup	...	...	...	...	4
Typhoid Fever	...	...	...	...	66
Continued Fever	...	...	...	...	1
Relapsing Fever	...	...	...	...	—
Puerperal Fever	...	...	...	...	1
Erysipelas	...	...	...	...	71
					<hr/>
					862

TABLE III.

No. of Visits to Common Lodging-houses	...	...	476
Slaughter-houses	...	...	2625
Workshops	...	...	355
Cowsheds	...	...	117
Dairies and Milkshops	...	...	96
Cases of Infectious Disease	...	...	850
Cattle Market	...	...	100
Fish, Fruit, and Vegetable Market	...	...	290
Canal	...	...	130
—4918			

TABLE IV.

No. of Notices served to Abate Nuisances	..	...	443
No. of Notices served under Housing of Working Clauses Act	...	...	29
No. of Houses Closed or Repaired	...	...	...
No. of Samples of Food and Drugs taken for Analysis	...	...	154
No. of Houses Disinfected	...	...	655
No. of Schools Disinfected	...	...	21
No. of Drains Tested	...	...	26
No. of Licences Granted for Movement of Swine	...	...	1195
No. of Letters Written re Nuisances	...	...	122

TABLE V.

No. of Private Slaughter-houses on Register (3 not in use)	...	...	27
No. of Cowsheds	...	...	39
No. of Milkshops	...	...	43
No. of Workshops	...	...	157
No. of Common Lodging-houses	...	...	8

TABLE VI.

NUISANCES.

No. of Drains Opened, Cleansed, Relaid, Trapped, Ventilated, etc.	...	...	245
No. of Water Closets Opened and Repaired	...	...	77
No. of New W.C.'s Provided in lieu of Offensive Privies	...	...	164
No. of Privies Converted into Water Closets	...	...	125
No. of Ashpits Re-built or Repaired	...	...	65
No. of Ash Boxes Provided	...	...	44

No. of Roofs or Spouting Repaired	...	...	...	6
No. of Cesspools Cleansed	...	...	...	144
No. of Manure and Offensive Accumulations Removed	...	...	...	24
No. of Cases of Stagnant Water Removed	...	...	...	7
No. of Filthy Houses Cleansed	...	...	...	2
No. of Overcrowding Abated	...	...	...	7
No. of Yards Paved or Asphalted	...	...	...	38
No. of Swine Removed	...	...	...	10
No. of Fowls, Pigeons, etc., Removed	...	...	...	55
No. of Smoke Nuisances Abated	...	...	...	2
No. of New Urinals Erected	...	...	...	2
No. of New Privies Erected	...	...	...	2
				<hr/>
				1019

TABLE VII.

The following table gives the number of privies and ashpits cleansed, the number of loads of soil taken therefrom, also the number of loads of refuse collected and the disposal of the same:—

No. of Privies Emptied	...	...	...	...	18,515
No. of Dry Ashpits Cleansed by Night Soil	...	...	...	...	6338
No. of Ashpits Cleansed with Privies attached	...	...	...	...	9487—15,825
No. of Loads removed from Ashpits combined with Privies	...	...	...	...	8047
No. of Loads removed from Dry Ashpits by Night Staff	...	...	...	...	4165
No. of Loads Collected by Day Staff	...	...	...	...	9543—21,755
No. of Loads Burned at the Destructor	...	...	...	...	14,584
No. of Loads Tipped	...	...	...	...	5964
No. of Loads taken to Farmers	...	...	...	...	1207—21,755

The number of Carcasses and Articles Destroyed by Destructor:—

Mattresses	...	...	...	...	...	...	1343
Beds	...	...	...	...	...	...	54
Pillows	...	...	...	...	...	...	367
Beasts' Carcasses	...	...	...	...	...	...	24
Sheep Carcasses	...	...	...	...	...	...	21
Calves' Carcasses	...	...	...	...	...	...	217
Pigs' Carcasses	...	...	...	...	...	...	21
Dogs	...	...	...	...	...	...	830
Foals	...	...	...	...	...	...	1
Goats	...	...	...	...	...	...	2

TABLE VIII.

FOOD SEIZED OR SURRENDERED AND DESTROYED
DURING THE YEAR.

Articles of Food.	No.	lbs.	Pro- ceedings	Penalties
Carcases of Beef	29	18046		
Sheep	21	1014		
Calves	20	1096		
Pigs	14	1729		
Lambs	2	70		
Plucks	34			
Beasts' Hearts	27			
„ Livers	36			
„ Heads	27			
Meat		249		
Crabs	2 Barrels			
Rabbits	144			
Boxes of Kidneys	3			
	359	17,204		

TABLE IX.

Summary of Samples purchased under the Sale of Food and Drugs
Acts during the year 1906.

No.	Nature of samples	Pure	Adulterated.	Summons issued.	Convictions,	Penalties.	Costs.
						£ s. d.	£ s. d.
88	New Milk	79	9	9	4	4 10 0	3 16 0
9	Skimmed Milk	7	2	1	1	10 5 0	1 7 0
14	Butters	13	1	1	1	0 10 0	0 19 0
8	Lards	8					
3	Cheese	3					
3	Pepper	3					
2	Ground Ginger	2					
7	Baking Powder	7					
1	Paregoric	1					
3	Glycerine	3					
1	Spirits of Nitre	1					
1	Cream of Tartar	1					
1	Friars Balsam .	1					
1	Castor Oil	1					
142		130	12	11	6	15 5 0	6 2 6
INFORMALLY PURCHASED.							
1	Corned Beef . .	1	Free from preservatives or colouring matter.				
6	Salmon	5	Free from preservatives of colouring matter.				
			1 Contained a bovan preservative.				
1	Sardines	1	Preserved in genuine olive oil.				
1	Rabbit	1	Free from preservatives or colouring matter.				
2	Lunch Tongue .	1	Free from preservatives or colouring matter.				
			1 Decomposed.				
1	Boar's Head . . .	1	Slight indication of a bovan preservative.				
154	Total Samples.						

TABLE X.

Particulars as to the Adulterated Samples and results of Prosecutions.

No. of		Penalty.	Costs.
3	NEW MILK.—The sample contained only $14/15$ ths of the minimum proportion of fat, that is 3 per cent. natural to genuine new milk	Dismissed.	
5	NEW MILK.—Contained only $\frac{57}{60}$ ths of the minimum proportion of fat	Dismissed.	
13	NEW MILK.—Contained less than $13/15$ ths of the minimum proportion of fat	1 0 0	0 19 0
15	BUTTER.—Asked for. Declared by vendor to be margarine. For not having it labelled	0 10 0	0 19 0
19	NEW MILK.—Contained only $\frac{57}{60}$ ths of the minimum proportion of fat	0 10 0	0 19 0
37	SKIMMED MILK.—No proceeding taken, as the deficiency was so slight	—	—
57	NEW MILK.—Contained only $1\frac{1}{5}$ ths of the minimum proportion of fat	Dismissed.	
87	NEW MILK.—Contained only $1\frac{1}{5}$ ths of the minimum proportion of fat	Dismissed	
88	NEW MILK.—Contained only $1\frac{1}{2}$ ths of the minimum proportion of fat	Dismissed.	
102	NEW MILK.—Contained added water to the extent of 6%	1 0 0	0 19 0
108	NEW MILK.—Contained added water to the extent of $10\frac{1}{2}$ % ..	2 0 0	0 19 0
135	SKIMMED MILK.—Contained added water to the extent of 12 parts And 28 grains of boric acid per gallon	Dairy Company Fined 10 0 0 Servant fined 0 5 0	0 19 0 0 8 6
		15 5 0	6 2 0

Yours obediently, CHARLES E. PARKIN, Chief Inspector.

APPENDIX A.

**REPORT OF DEPUTATION ATTENDING THE INFANTILE
MORTALITY CONFERENCE, LONDON,
13th and 14th, 1906.**

In compliance with the instructions of the Corporation, we, the undersigned, attended the above Conference, and beg to submit the following report thereon:

The Conference arose out of a similar one held in Paris last year, and was convened by the Mayor of Huddersfield, Alderman Broadbent, in response to a memorandum signed by all the English members present at the Paris Congress.

As the present Conference is the first of its kind held in this country, and considering the Mayor of a provincial borough was instrumental in its promotion, it is a matter of considerable gratification that so much success attended the same.

The meetings were held in the Caxton Hall, Westminster, which, with a suite of rooms for reception and secretarial purposes, were placed at the disposal of the Conference free of charge through the liberality of the Westminster City Council.

The number of continuous attendance was extremely gratifying. Local Authorities sent delegates, and there were also private members, all of whom were interested in the objects of the Conference, either directly or through their association with subjects cognate to the question of infant mortality.

Before the Conference was held, considerable publicity was obtained for its object by reference in the Press, in Parliament, and elsewhere, and by the fact that their Majesties graciously accepted the position of patrons. There was a further advantage in obtaining as president the Chairman of the Local Government Board, the Right Hon. John Burns, M.P., whose office and personality lent influence to the opening meeting, and whose words were pregnant with suggestion for future action. In his introductory address a few aspects of the case escaped notice. At one time it was of infant mortality. When in eloquent terms he referred to the social delinquent, whose doings complicate many questions in addition to that of infant mortality. When in eloquent terms here he referred to the social need of concentrating on the mothers of the hopeless infants, whose untimely deaths were even less pathetic than the conditions under which they occurred, he carried the united sympathy of the audience with him. In concluding, he promised his personal help and that of his department on behalf of the Conference. We have already posted to each member of the Council a copy of the address delivered on this occasion.

After the introductory address of the President, the work of the Conference was begun, and in the two days following interesting and valuable discussions took place on the following subjects:—

FIRST DAY'S PROGRAMME.

- 1.—The Teaching of Elementary Hygiene in reference to the rearing of Infants.
- 2.—The Appointment of Qualified Women, with special reference to the Hygiene and Feeding of Infants.
- 3.—The Public Supply of Specially Prepared Milk for the Feeding of Infants.
- 4.—The Teaching of the Hygiene of the Expectant and Suckling Mother.
- 5.—The Influence of Alcoholism on Infant Mortality, and the Ante-Natal Causes of Infantile Mortality, including Parental Alcoholism.
- 6.—The Relation of Premature Births to Infantile Mortality.

SECOND DAY'S PROGRAMME.

- 1.—Earlier Registration of Notification of Births.
- 2.—Infant Life Insurance.
- 3.—Infantile Mortality and the Employment of Married Women in Factory Labour before and after Confinement.
- 4.—The Regulation of the placing of Infants out to Nurse.
- 5.—The Chemistry of Infants' Food Stuffs.
- 6.—The Increase of the Powers of Local Authorities in regard to Milk Supplies.
- 7.—The Operation of the Midwives Act in England, with a view to its extension to Scotland and Ireland in relation to Infantile Mortality.

The reading of these papers gave rise to interesting and most important discussions on the problems affecting infant mortality directly and indirectly, and touched closely the whole economic and social conditions of the people, so also were the methods by which it might be combated. The focus opinion on certain legislative amendments that would further the discussion not only emphasised this phase of the question, but served to work. These were expressed in the following resolutions, which were unanimously adopted:—

- 1.—That the Education Department be urged to add to elementary hygiene with reference to the dietary and rearing of infants to their present scheme for systematically training girls in the senior classes in the practice and principles of personal hygiene and the elements of dietary.
- 2.—That, in the opinion of this Committee, immediate legislation is required to enable Sanitary Authorities to establish or support depots for the supply of pure, or modified, or sterilised milk, and to defray any cost out of the monies available for Public Health Purposes.
- 3.—That in view of the information submitted, the Conference is of opinion that all still births should be notified within forty-eight hours to the Medical Officer of Health of the district in which they occur, and that no burial shall take place without a medical certificate.
- 4.—That notification of all births be given within forty-eight hours to the Medical Officer of Health of the district in which they occur.
- 5.—That, in the opinion of this Conference, the question of the insurance of infants' lives under twelve months is one demanding serious consideration, and, with the view to receiving reliable information, the Government should be asked to appoint a Departmental Committee of Enquiry on the whole question.

- 6a.—That the period of one month's abstention from work away from home now imposed on mothers be extended to at least three months, and that on their return to work evidence must be produced, satisfactory to the Local Authority that proper provision has been made for the care of the child.
- b.—That no employer of labour shall permit a woman advanced in pregnancy to engage in factory labour, unless her ability therefor has been certified to the satisfaction of the Local Authority.
- 7a.—That, having regard to the ascertained fact that in centres of industry where women are largely employed away from their home an excessive number of deaths of infants take place, and that this is contributed to by improper conditions existing at the homes in which infants are placed out to nurse, it is necessary that the persons by whom and the places into which infants are received should be under supervision by the local Sanitary Authority.
- b.—That the Infant Life Protection Act be amended to remedy abuses which are not at present provided against.
- 8.—That all preparations offered or sold as food for infants should be certified by the Government Analyst as non-injurious, and that each packet should contain its analysis.
- 9.—That the dairies, milk-shops, and cow-sheds Order is defective, and that any amendment should extend the definition of disease as applied to animals, and should make the provision of Regulations by Local Authorities compulsory. That the scope of the Regulations by Local Authorities should be extended to cover dirty milk, and should enable Local Authorities to prohibit the sale of any milk which fails to comply with the conditions of purity agreed upon.
- 10.—That, in the opinion of this Conference, the Midwives Act, 1902, should be extended to Scotland and Ireland.

At the close of the Conference, and in order to enable the work which it has begun to be continued, the Mayor of Huddersfield proposed that the delegates and members of the Conference resolve to form themselves into a National Council for the Prevention of Infant Mortality, and that the Committee and Executive Committee of the Conference become the Committee and Executive Committee of the Council.

In order to give effect to this latter intention, it would be desirable that the presently existing members of that committee be continued.

In conclusion, as your delegates, we desire to express our appreciation of the value of the meetings, which were conducted throughout on purely business lines, and which ran successfully as to their main object, and yet without any of the attractions which congresses on a more elaborate scale find necessary in order to induce members to attend.

In conclusion, it may be said that the best result of the Conference lies in the fact that the attention of over 4000 local bodies has been called to the subject, and that, through the reports and leaders in the newspapers of the United Kingdom, the attention of the community generally has been called to the condition of affairs the continuance of which is discreditable to Public Health administration.

GEORGE HENRY LODGE, L.R.C.P. and L.D.S.,

ALFRED ROBINSON, M.D., Medical Officer of Health,

Delegates.

APPENDIX B.

THE PREVENTION OF CONSUMPTION AND OTHER FORMS OF
TUBERCULOSIS.

GENTLEMEN,—

At your request I have made the following brief report on the above subject, to which your special attention has been called by a circular from the National Association for the Prevention of Consumption and other forms of Tuberculosis. I may at once say that I entirely agree with the objects and methods of the Association as put forth in the circular, and I would merely point out how these preventive methods may be made applicable to the conditions prevailing in Rotherham.

1. THE NECESSITY FOR STRONGER AND MORE ACTIVE MEASURES IN ROTHERHAM.—I would refer you to my Annual Report of the Health of the Town for 1905, just published. You will find (pages 4 and 14) that I have drawn special attention to the prevalence of Consumption, and the necessity of dealing with it.

The fact that one out of every five persons between the ages of 15 and 60 dies of Consumption of the Lungs, is sufficient to warrant the employment of every means in our power to diminish this terrible scourge.

Not only is the actual loss of life to be considered, but the misery and poverty produced by the protracted course of the disease. The working man attacked during the prime of life speedily finds his resources exhausted, and, together with those dependent on him, has to face starvation or the Workhouse. The general Hospitals will not admit cases of Phthisis, and numbers of working men, steady and of good character, are every year admitted to the Workhouse suffering from this disease. Certain of the occupations pursued in the town render workers specially liable to Phthisis—for example, coal-mining, and grinding and polishing metals.

2. MEASURES TO BE TAKEN FOR THE PREVENTION OF TUBERCULOSIS.—It must be recognised that infection is not hereditary, but that susceptibility to the disease is extremely so. The object of all preventive measures is to keep the seed from reaching the receptive soil, to prevent susceptible persons from being infected.

There are three sources of infection, and it is against these that preventive efforts must be directed.

- (a) The flesh of tubercular animals.
- (b) The milk of tubercular animals.
- (c) The expectoration of phthisical persons.

These are in the reverse order of their importance, the last being undoubtedly the chief factor in the spread of Tuberculosis.

(a) PREVENTATIVE MEASURES AS REGARDS DISEASED FLESH—

- (i) Meat inspection, and destruction of diseased flesh.
- (ii) Abolition of private slaughter-houses in order to render inspection more efficient.

(b) PREVENTATIVE MEASURES AS REGARDS INFECETED MILK—

The Rotherham Corporation Act (1904) gives wide powers in this respect, which have not yet been fully utilised.

I would refer you to Part XII of the Act. This gives power to impose penalties on persons knowingly selling tubercular milk, or keeping tubercular cows; obliges dairymen to notify the existence of tubercular cows; and gives power to take samples of milk, and to inspect cows.

The heating of milk to a point short of boiling for quarter of an hour destroys the tubercle bacillus.

I am not in favour of the municipal supply of milk. Municipal control is of much greater importance.

(c) PREVENTATIVE MEASURES AS REGARDS DISSEMINATION OF TUBERCULOSIS PHTHISICAL PERSONS—

- (i) Enforcement of bye-laws against spitting in streets, public places, and vehicles. The sputum of phthisical persons contains myriads of the germs of tuberculosis.
- (ii) Proper ventilation of workshops and factories. Powers exist for the enforcement of this.
- (iii) Voluntary notification of phthisis. On this I place great importance, and I have long advocated it. It is the basis of all dealings with individual cases. It is in operation in many of the large towns, and has been found to work well, and to excite no opposition.

On it primarily depend the following measures:—

- (iv) Education of the patient
 - (a) By personal visitation and distribution of printed instructions.
 - (b) By residence in a Sanatorium for a limited time.
- (v) Disinfection of infected houses.
- (vi) Supply of spit bottles and disinfectants.
- (vii) Isolation of consumptives may produce benefit by
 - (a) Cure of certain cases.
 - (b) Education of the patients.
 - (c) Removal of foci of infection.

MEANS OF ISOLATION IN ROTHERHAM—

- (a) A special ward in the Workhouse. Such a ward has for some time been in use.
- (b) Vacant wards in the New Isolation Hospital might be used when available. The site is a good one, and all means of treatment are available. This system is adopted at Brighton and some other places.
- (c) The new Small-pox Hospital might be built to accommodate phthisis patients when there was no Small-pox in the district.

I venture to lay these suggestions and observations before you in the hope that you may find them of practical value, in your consideration of this extremely important matter.

I am, Gentlemen, Your Obedient Servant,

ALFRED ROBINSON, M.D.

APPENDIX C.

REPORT UPON THE WORKING OF THE MIDWIVES ACT
IN ROTHERHAM.

The "Midwives Act" came into operation on April 1, 1905, its object being to secure the training and supervision of midwives by the establishment of a system of certification and enrolment. It was brought into being on account of the large number of cases of Puerperal Fever, and still births occurring in the practice of midwives. It was found that this very important part of the profession was very largely in the hands of ignorant women, most of them illiterate, and nearly all without the most rudimentary ideas of cleanliness. As there was thus an appalling and unnecessary sacrifice of the lives of women and infants, it was considered high time that midwives should be brought under control.

As the supply of trained women was altogether too small, it was found that it would be impossible at once to forbid untrained women to practice. Hence a compromise was made, and women who had been in bona-fide practice previous to April, 1905, for one year, were granted certificates in order that the work might be carried on until sufficient trained women were obtained. It was hoped that by a gradual process of extinction the trained would gradually supplement the untrained midwives.

Until 1910, however, any uncertified woman may attend women in childbirth so long as she does not give herself the title of midwife. At present there is no means of exercising control over such women.

In Rotherham, certificates were distributed by the Inspector of Nuisances, and practically no medical supervision was exercised until May, 1905. Since that time active steps have been taken. All the midwives on the roll were personally visited, and instructed as to the rules of the C.M.B. Printed Regulations were drawn up and sent by post to each with accurate directions how to fill up books and registers.

The inspection revealed a very satisfactory state of affairs. There were 23 midwives on the roll, one only of whom had been admitted on account of possessing a certificate of efficient training. The remainder obtained certificates in virtue of having been in "bona fide practice" for one year previous to April, 1905. The majority were women of the lowest class, and with few exceptions, dirty in the extreme. They had no washable dresses, no apparatus, and had no conception of the importance of cleanliness.

All except four were utterly illiterate, and depended on their children or neighbours to fill up their registers and books. One actually told me it was no use my sending her any written instructions; she could not read them. None of the untrained midwives had any idea of how to use a clinical thermometer. Not only were they ignorant of how a labour should be properly conducted, but most of them indulged in practises of the most harmful nature. For instance, it seemed a necessary part of their practise to keep their patient (and incidentally themselves) well plied with brandy throughout the labour.

The Female Health Visitor is continually explaining the rules to these women. Some endeavour to improve, others take no notice, and one stated that she had been practising for the last 30 years and did not intend to alter her methods.

Dr. Riddell has been appointed a recognised teacher by the Central Midwives Board for this district, and at present has a class of 6 nurses preparing for the August examination. The examination, in my opinion, is too difficult, as many as nearly 50 per cent. of the candidates being rejected. The consequence is that the supply of properly trained midwives is not equal to the demand. The percentage of confinements attended by midwives in Rotherham is at least 75.

Anyone having an opportunity of examining their books would, I feel sure, be astonished at the number and the amount of money they make. Any nurse who will take the trouble to work and pass the examination would be well repaid for her exertions in a very short space of time, because no one can realise the class of women the Central Midwives Board have been compelled to place on the Midwives Roll without a certificate of training. It is absolutely impossible for many of them to carry out the regulations owing to their ignorance, lack of training, and more particularly their inability to read a clinical thermometer with any degree of accuracy. I have heard of one woman who when told to purchase an ordinary thermometer, actually went and bought a weather barometer!

METHODS OF SUPERVISION.

1.—The names and addresses of the midwives are placed on a roll, and any change of address has to be notified. All midwives have to send in notice of their intention to continue practice in the month of January in each year.

2.—The midwives are frequently visited by myself and their registers and appliances inspected.

3.—The Female Health Visitor visits and instructs them, and also occasionally attends confinements with them for the purpose of giving them instruction.

4.—Births attended by midwives are notified to me, and the Health Visitor visits the houses, leaving instructions as to the feeding of infants, etc.

5.—Still births are also notified to me, and a record is kept of them.

6.—In any case of malpractice or flagrant breach of rules, I report the matter to the Midwives Committee, who can either suspend the woman from practice or can report her to the Central Midwives Board with a recommendation that her name be removed from the Roll.

7.—Cases of Puerperal Fever are also notified to me, and are followed by immediate investigation and suspension and disinfection of the Midwife. I have found that these women who have had certificates "presented" to them make a "dead set" against, and try to "boycott" by all means in their power, the only properly qualified and certificated (by examination) midwife in the County Borough, who informs me that they have already succeeded in seriously damaging her prospects. One of these women when asked how she would bring young children up, replied with evident satisfaction, "I have had 10 children myself, and 8 of them are dead, that is how I bring up children."

Suspension of midwives has been adopted in five cases, during the last twelve months, one being suspended for one week, three for one month, and one for two months.

Suspension has been found the most useful method of dealing with these women, because when this course is adopted they are kept under control, whereas if they are removed from the roll no further supervision can be exercised over them.

I consider that our chief object must be to make the best we can out of the very bad material we have at present, and to exercise such a supervision as will permit as little harm to be done as possible.

A certain amount of improvement has already taken place, and we may expect still more; but until the present untrained midwives are replaced by properly trained women matters must necessarily be in an unsatisfactory condition.

The Medical Officer of Health of the Local Supervising Authority would naturally appear to be the proper official to carry out the duties prescribed by Rule 20 under the direction of the Local Supervising Authority; it would be absurd to have appointed any one but a medical man for the purpose. In conclusion, there ought, I think, to be some distinction between a woman who holds a certificate of proficiency in midwifery and one who has been allowed to register as having been in practice before the passing of the Midwives Act, 1902.

The Central Midwives Board at the present time calls them all "certified midwives," and allows them all so to style themselves **which** all of them are only too proud to do.

